

GOVERNMENT OF INDIA

DEPARTMENT OF ARCHAEOLOGY

**CENTRAL ARCHAEOLOGICAL
LIBRARY**

CALL No. 57205 / Man

D.G A. 79.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE.

PUBLISHED UNDER THE DIRECTION OF THE

ROYAL ANTHROPOLOGICAL INSTITUTE

OF

GREAT BRITAIN AND IRELAND.



1858
XXXVII.

1937.

Nos. 1—237.

WITH PLATES A—M.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON W.C.1.

General Agent: FRANCIS EDWARDS, 83, High Street, Marylebone, W.1.

New York Agents: Messrs. G. E. STECHERT & Co.

And to be obtained at all Booksellers.

LIST OF AUTHORS.

N.B.—The Numbers to which an asterisk is added are those of Reviews of Books.

- ADAM, LEONHARD, 24*.
 AITKEN, BARBARA, 121*.
 AIYAPPAN, A., 130, 140*, 219.
 ALLAN, JOHN, 157.
 ARMSTRONG, A. L., 29, 81*.
 ASBOE, WALTER, 90.

 BEAGLEHOLE, ERNEST, 176.
 BEASLEY, H. G., 71, 72, 175.
 BEDFORD, O. H., 9.
 BENTON, SYLVIA, 88.
 BLAGDEN, C. O., 21*, 22*.
 BOOME, E. J., 104*.
 BOSE, J. K., 110, 189.
 BOULTON, MRS., 160.
 BREUIL, L'ABBÉ, H., 187.
 BROWN, GEORGE W., 3.
 BURKITT, M. C., 83*, 205*, 209*.
 BUXTON, L. H. D., 20*, 39*, 79, 107*, 203*, 204*.
 BYHAN, A., 146.

 CARR-SAUNDERS, A. M., 63.
 CHILDE, PROF. V. GORDON, 55, 82*, 162.
 CLARK, W. E. LE GROS, 73.
 CORBLAU, SIMONE, 185, 198.
 CORFIELD, FRANK, 137.
 COX, IAN, 182*.

 DANIEL, F., 2, 28.
 DAVIES, OLIVER, 206*.
 DERRY, D. E., 134.
 DIGBY, ADRIAN, 199, 235.
 DREW, A. B. V., 16*, 64*, 210*.
 DUBOIS, EUGÈNE, 1.
 DUNLOP, MARGARET, 135.
 DUYVIS, GUDA, E. G., 8.

 EARTHY, E. D., 15*, 42*, 44*, 45*, 164*, 165*.
 ELWIN, VERRIER, 7.
 EVANS, SIR ARTHUR, 221.
 EVANS, I. H. N., 96*, 100*.
 EVANS-PRITCHARD, E. E., 23*, 37, 46*, 126*.

 FAWCETT, C. B., 25*.
 FIELD, HENRY, 4, 69, 174.
 FIRTH, RAYMOND, 167*, 211*.
 FLEURE, H. J., 62*, 99*.
 FORDE, C. DARYLL, 5, 77.

 GASKIN, L. J. P., 14*.
 GATES, R. RUGGLES-, 32.
 GOODWIN, A. J. H., 223.
 GORDON, D. H., 152, 232.

 HADDON, A. C., 120.
 HALL, G. ROME, 188.
 HAMBLY, WILFRID D., 148.
 HARRISON, H. S., 60*, 138.
 HAWKES, C. F. C., 163*, 208*.
 HEATH, D. F., 91.
 HEMMING, ARTHUR G., 53.
 HOBLEY, C. W., 41*.
 HOCART, PROF. A. M., 54, 86, 109, 150, 170, 196, 217.
 HORNBLLOWER, G. D., 186, 200, 234.
 HORNELL, J., 98*, 153, 178.
 HUNTINGFORD, G. W. B., 177.
 HUTTON, J. H., 216, 231*.

 INGRAMS, W. H., 6, 33, 154.
 IVENS, WALTER, 38*.

 JAMES, E. O., 102*, 105*.
 JENNESS, DIAMOND, 89.

 KARN, M. N., 65*.
 KARSTEN, RAFAEL, 26.
 KEITH, SIR A., 108*.

 LANCASTER, D. GORDON, 74.
 LAYARD, JOHN, 166*.
 LAZARUS, D. M., 71.
 LEACH, E. R., 220.
 LEVER, R. J. A. W., 151.
 LINDGREN, E. J., 17*.
 LIU, CHUNGSHEE H., 52.
 LONG, RICHARD C. E., 122*, 123*, 124*, 125*.

 MACALISTER, R. A. S., 144*.
 MACFARLANE, EILEEN W. ER-LANSON, 159.
 MACRAE, F. B., 74.
 MAIR, L. P., 226*, 227*.
 MARSTON, A. T., 35.
 MATHESON, HILDA, 12*.
 MENON, K. GOVINDA, 179.
 MÉTRAUX, ALFRED, 131.
 MICHELSON, TRUMAN, 111.
 MILES, G. L. P., 43*, 127*.
 MILLS, J. P., 18*, 156.
 MINNS, E. H., 80*, 207*.
 MONTELL, GÖSTA, 136.
 MORANT, G. M., 95, 133, 193*.
 MORSE, W. R., 9.
 MÜNTER, A. H., 194*.
 MURRAY, J. H. P., 172.
 MURRAY, M. A., 84*.
 MYLONAS, GEORGE E., 87.

 MYRES, PROF. J. L., 30, 31, 47*, 48*, 66*, 128*, 143*, 145*, 147, 224, 225.

 NADEL, S. F., 93, 106*.
 NUNN, G. N. N., 197.

 OBERG, KALERVO, 117.
 O'BRIEN, T. P., 129, 173, 237.

 PALMER, SIR H. R., 68, 213.
 PETRIE, SIR FLINDERS, 116.
 PETRI, BERNHARD EDUARD, 9.
 PIDDINGTON, RALPH, 40*, 149.

 RADCLIFFE-BROWN, A. R., 201.
 RAGHAVAN, M. D., 169.
 RAGLAN, LORD, 112, 236.
 RAWLINSON, H. G., 49*, 85*, 141*, 168*.
 RICHARDS, A. I., 212*, 222.
 RICHARDS, F. J., 120, 142*.
 RÓHEIM, GEZA, 57, 218.
 ROSE, H. J., 27, 50, 101*, 103*, 214.
 ROTH, KINGSLEY, 155.

 SARKAR, S. A., 215.
 SCHUSTER, CARL, 132.
 SEIDENFADEN, ERIK, 233.
 SELIGMAN, B. Z., 76.
 SELIGMAN, C. G., 19*.
 SMITH, E. W., 230*.
 STARKEY, J. L., 75.
 STEVENSON, H. N. C., 56, 92.
 SUFFERN, CANNING, 181*, 195*.

 TAYLOR, R. H. R., 171.
 TINDALE, NORMAN B., 34.

 UPCOTT, ROSEMARY, 61*, 97*.

 VARLEY, D. H., 13*, 183*.

 WAINWRIGHT, G. A., 51.
 WALES, H. G. QUARITCH, 113.
 WAYLAND, E. J., 67, 184.
 WHITEHEAD, G. O., 228*.
 WILD, R. P., 115.
 WILLIAMS, F. E., 114.
 WILLIAMS, M. P., 199.
 WINTERBOTTOM, J. M., 158.
 WORTHINGTON, E. B., 58.

 YOUNG, MATTHEW, 59, 202*.
 YOUNG, T. CULLEN, 10*, 11*, 229*.

CENTRAL ARCHAEOLOGICAL
 LIBRARY, NEW DELHI.

Acc. No. 16896
 Date. 57/9/55

CONTENTS.

ORIGINAL ARTICLES.

	No.
Africa : Egypt. An Egyptian Mirror Handle in fossil bone (<i>Illustrated.</i>) D. E. DERRY	134
Osiris and his rites : I (<i>with Plate K.</i>) G. D. HORNBLOWER	186
— II. G. D. HORNBLOWER	200
Africa : South. The Boats of Victoria Nyanza : I. (<i>Illustrated.</i>) G. W. B. HUNTINGFORD	177
— II. Note on Mr. Huntingford's Paper. JAS. HORNEILL	178
Reciprocal Clan Relationships among the Bemba of N.E. Rhodesia. (<i>Illustrated.</i>) A. I. RICHARDS	222
Stone Age Sites in Northern Rhodesia. (<i>Illustrated.</i>) F. B. MACCRAE and D. GORDON LANCASTER	74
A Y-shaped point in Natal, and a big palette from the Transvaal. (<i>Illustrated.</i>) L'ABBÉ H. BREUIL	187
Africa : West. A Lake Village in West Africa. G. ROME HALL, M.D.	188
Social Change in a West African Village Community. PROF. C. DARYLL FORDE	5
The Poro in Modern Business : a preliminary Report of Field Work. GEO. W. BROWN.	3
'Thunder-bolt Celts' from Benin. (<i>Illustrated.</i>) H. G. BEASLEY.	175
Gold Coast. A Method of Bead-making practised in the Gold Coast. (<i>Illustrated.</i>) R. P. WILD	115
A Note on the Angoni Paramountcy. J. M. WINTERBOTTOM	158
Nigeria. Bead Workers of Ilorin. (<i>Illustrated.</i>) F. DANIEL	2. 28
Bussa Regalia. (<i>With illustrations.</i>) D. F. HEATH	91
America : North. A carved pestle and pipe-stem from British Columbia. (<i>With Plate L and Illustration.</i>) M. P. WILLIAMS, with a note by ADRIAN DIGBY	199
Anthropology : Physical. On the fossil human skulls recently discovered in Java and Pithecanthropus erectus (<i>With Plate A and Illustrations.</i>) PROF. EUGÈNE DUBOIS	1
Some Ancient Human Skeletons excavated in Siam. (<i>With Plate F.</i>) H. G. QUARITCH WALES	113
The Status of Pithecanthropus. PROF. W. E. LE GROS CLARK	73
The Literature of Human Palaeontology : a review of 'Fossilium Catalogus. Pars 74. Hominidae Fossiles.' (<i>Illustrated.</i>) G. M. MORANT	133
Archæology : France. Significance of the Oolitic limestone escarpments in the life of Bronze Age France. (<i>Illustrated.</i>) MARGARET DUNLOP	135
Two Circular Ornaments from France. (<i>Illustrated.</i>) HENRY FIELD	4
Neolithic. Two neolithic implements of unusual size. (<i>With Plate I-J.</i>) HENRY FIELD	174
Knossos. The Chronological Place of the Vaulted Tombs at Knossos in relation to those of Ras Shamra. SIR ARTHUR H. EVANS, F.R.S.	221
Art. Comparison of aboriginal textile designs from South-Western China, with peasant designs from Eastern Europe. (<i>With Plate G.</i>) CARL SCHUSTER	132
Britain. British and Saxon fusion. SIR FLINDERS PETRIE	116
Canada. Some observations concerning the Stature of Freshmen entering the University of Toronto, Canada. JOHN ALLAN	157
Technology. Arrow-straighteners, thong-smoothers and bâtons-de-commandement. (<i>With Plate E.</i>) DIAMOND JENNESS	89
Fiji. A composite 'Tambua' from Fiji. (<i>With Plate H.</i>) KINGSLEY ROTH	155
Oceania. Boat construction in Botel Tobago. (<i>With Plate M and Illustrations.</i>) E. R. LEACH	220
Pacific : Technology. Live bait fishing in Ontong, Java. (<i>With Plate D.</i>) D. M. LAZARUS	71
Notes on the fishing appliances from Ontong, Java. H. G. BEASLEY	72
Papua. The Natives of Mount Hagen, Papua : Further Notes. (<i>Illustrated.</i>) F. E. WILLIAMS	114
Polynesia. Cultural Peaks in Polynesia. ERNEST BEAGLEHOLE	176
Race. Genetics and Race. PROF. R. RUGGLES-GATES, F.R.S.	32
Religion. Initiation and healing. PROF. A. M. HOCART	54
Technology. On the causes of grey and black coloration in prehistoric pottery. PROF. V. GORDON CHILDE. F.S.A.	55
A figurine vase from Tiflis. (<i>Illustrated.</i>) PROF. J. L. MYRES, F.B.A., D.Sc., D.Litt.	31
A modern 'Kernos' Vessel from Tiflis. (<i>With Plate B.</i>) PROF. J. L. MYRES, F.B.A., D.Sc., D.Litt.	30
Arabia. A Dance of the Ibex hunters in the Hadhramaut. Is it a pagan survival? (<i>Illustrated.</i>) W. H. INGRAMS, O.B.E.	6
Bee-keeping in the Wadi Du'an. (<i>Illustrated.</i>) W. H. INGRAMS, O.B.E.	33
Asia.	
Assam. Marriage-classes among the Chirus of Assam. J. K. BOSE	189
The Custom of temporary marriage among the Eastern Angami Nagas of Assam. J. P. MILLS	156
Burma. Land tenure in the Central Chin Hills of Burma. (<i>Illustrated.</i>) H. N. C. STEVENSON	56
India. Eastern Himalayan blood-groups. (<i>Illustrated.</i>) EILEEN W. ERLANSON MAC FARLANE	159
Red painted pottery from Cochin State. (<i>Illustrated.</i>) K. GOVINDA MENON	179
Tibet. Agricultural Methods in Lahoul, Western Tibet. WALTER ASBOE	90
Palestine : Archæology. A late Helladic vase from Tell Duweir in Palestine. (<i>Illustrated.</i>) J. L. STARKEY	75

REVIEWS.

	No.
Africa. Delachaux, Th. and Thiébaud, Ch. E. <i>Land und Völker von Angola.</i> E. D. EARTHY ...	15
Duggan-Cronin, A. M. <i>The Bantu Tribes of South Africa, Vol. IV. Sect. II.</i> E. D. EARTHY ...	165
Hamilton, J. H. de C. <i>The Anglo-Egyptian Sudan from Within.</i> G. O. WHITEHEAD ...	228
Hunter, Monica. <i>Reaction to Conquest.</i> CULLEN YOUNG ...	11
Herzog, Georg and Blooah, Charles G. <i>Jabo Proverbs from Liberia.</i> E. D. EARTHY ...	45
Jensen, Ad. E. <i>Im Lande des Gada.</i> E. D. EARTHY ...	42
Jones, Henry. <i>The Earth Goddess.</i> G. P. L. MILES ...	43
Junod, Howard Philippe and Jacques, Alexandre. <i>The Wisdom of the Tonga-Shangan People.</i> CULLEN YOUNG ...	10
Kirby, P. R. <i>The Musical Instruments of the Native Races of South Africa.</i> D. VARLEY ...	13
Krige, E. J. <i>The Social System of the Zulus.</i> CULLEN YOUNG ...	10
Leakey, L. S. B. <i>Stone Age in Africa: an Outline of Prehistory in Africa.</i> C. F. C. HAWKES ...	163
Mair, L. P. <i>Native Policies in Africa.</i> HILDA MATHESON ...	12
Maunier, René. <i>Coutumes Algériennes.</i> A. B. V. DREW ...	16
Meek, C. K. <i>Law and Authority in a Nigerian Tribe, A Study in Indirect Rule.</i> L. P. MAIR ...	226
Melland, Frank; and Young, Cullen. <i>African Dilemma.</i> E. W. SMITH ...	230
Perham, Margery. <i>Native Administration in Nigeria.</i> L. P. MAIR ...	227
Posselt, F. W. T. <i>Fact and Fiction: A short account of the Natives of Southern Rhodesia.</i> CULLEN YOUNG ...	229
Rey, C. F. <i>The Real Abyssinia.</i> J. L. MYRES ...	47
Varley, Douglas H. <i>African Native Music.</i> L. J. P. GASKIN ...	14
Vergiat, A. M. <i>Les Rites Secrets des Primitifs de l'Oubangui.</i> E. D. EARTHY ...	164
Verhulpen, Edmond. <i>Baluba et Balubasés.</i> E. E. EVANS-PRITCHARD ...	46
Thurnwald, Richard C. <i>Black and White in East Africa.</i> C. W. HOBLEY ...	41
Westermann, Diedrich. <i>Die Glidyi-Ewe in Togo.</i> E. D. EARTHY ...	44
Young, T. Cullen. <i>African Ways and Wisdom.</i> G. W. SMITH... ...	230
America. Kroeber, A. L. <i>Uto-Aztecan Languages of Mexico.</i> RICHARD C. E. LONG ...	125
Mathiasen, Therkel. <i>The former Eskimo Settlements on Frederik VI's Coast.</i> IAN COX ...	182
Parsons, Elsie Clews. <i>Mila, Town of the Souls.</i> R. C. E. LONG ...	122
Radin, Paul. <i>An Historical Legend of the Zapotecs.</i> RICHARD C. E. LONG ...	123
Sauer, Carl. <i>Aboriginal Population of North-western Mexico.</i> RICHARD C. E. LONG ...	124
Spier, Leslie. <i>Tribal Distribution in Washington.</i> BARBARA AITKEN... ...	121
Anthropology: Physical. Puccioni, Nello. <i>Antropologia e etnografia delle genti della Somalia Vol. III. Etnografia e paletnologia.</i> L. H. D. BUXTON ...	203
Puccioni, Nello. <i>Antropometria delle genti della Cirenaica.</i> L. H. D. BUXTON ...	204
Schebesta, Paul. <i>Vollblutneger und Halbwürge.</i> S. F. NADEL ...	106
Schottky, Johannes. <i>Rasse und Krankheit.</i> M. YOUNG ...	202
Schreiner, K. E. <i>Zur Osteologie der Lappen.</i> G. M. MORANT ...	193
Schultz, Bruno K. <i>Rassenkunde deutscher Gaue Bauern im südlichen Allgäu, Lechtal und Breisgau.</i> A. H. MÜNTER ...	194
Wells, H. G., Huxley, Julian and Wells, G. P. <i>The Living Body: Patterns of Life: Evolution, Fact and Theory.</i> CANNING SUFFERN ...	195
Weninger, Joseph. <i>Rassenkundliche Untersuchungen an Albanern: Ein Beitrag zum Problem der dinarischen Rasse.</i> L. H. D. BUXTON ...	107
Archæology. Cheyner, Andre. <i>Jouannet: Grand-père de la Préhistoire.</i> M. C. BURKITT ...	83
Clark, J. G. D. <i>The Mesolithic Settlement of Northern Europe.</i> A. LESLIE ARMSTRONG ...	81
Curwen, E. Cecil. <i>The Archæology of Sussex.</i> C. F. C. HAWKES ...	208
Evans, Joan. <i>The Palace of Minos at Knossos: Index Volume.</i> OLIVER DAVIES ...	206
Frobenius, Leo. <i>Ekade, Ektab, die Felsbilder Fezzans.</i> M. C. BURKITT ...	205
Murray, M. A. <i>Cambridge Excavations in Minorca: Sa Torreta.</i> V. G. CHILDE ...	82
Petrie, Sir Flinders. <i>Shabtis.</i> M. A. MURRAY ...	84
Riet Lowe, C. Van. <i>A New Archæological Map showing the distribution of Prehistoric Paintings and Engravings in South Africa.</i> M. C. BURKITT ...	209
Vasić, Miloje M. <i>Preistoriska Vinča II.</i> ELLIS H. MINNS ...	80
<i>Preistoriska Vinča IV Kerámika.</i> ELLIS H. MINNS ...	207
Asia. Ashton, Leigh Editor. <i>Chinese Art.</i> C. G. S. ...	19
Bose, J. K. <i>Dual Organization in Assam.</i> F. J. RICHARDS ...	142
Chinese Medical Journal. <i>Davidson Black Memorial Anatomy and Anthropology Number.</i> L. H. D. BUXTON ...	20
Doughty, Charles M. <i>Travels in Arabia Deserta.</i> H. J. FLEURE ...	99
Gardner, G. B. <i>Keris and other Malay Weapons.</i> C. O. BLAGDEN ...	21
Gouru, Pierre. <i>Esquisse d'une Etude de l'Habitation Annamite dans l'Annam Septentrional et Central du Than Hoa au Binh Dinh.</i> I. H. N. EVANS ...	96
Gouru, Pierre. <i>Les Paysans du Delta Tongkinois: Etude de Géographie Humaine.</i> I. H. N. EVANS ...	96
Granquist, Hilma. <i>Marriage Conditions in a Palestine Village. Vol. II.</i> E. E. EVANS-PRITCHARD ...	23
Haddon, A. C. and Start, Laura E. <i>Iban on Sea Dyak Fabrics and their Patterns.</i> I. H. N. EVANS ...	100
Haslund, Henning. <i>Men and Gods in Mongolia.</i> E. J. LINDGREN ...	17
Held, G. J. <i>The Mahābhārata: an Ethnological Study.</i> J. L. MYRES ...	143
Iyer, Diwan Bahadur L. K. A. <i>The Mysore Tribes and Castes. Vol. I.</i> H. G. RAWLINSON ...	49
Körner, D. Theo. <i>Totenkult und Lebensglaube bei den Völkern Ost-Indonesiens.</i> C. O. BLAGDEN ...	22

	No.
Majumdar, N. G. <i>Explorations in Sind.</i> H. G. RAWLINSON	141
Montandon, George. <i>La Civilization Aïnou.</i> CANNING SUFFERN	181
Nishimura, Shinji. <i>A Study of Ancient Ships of Japan. Part I. Floats.</i> J. HORNEILL	98
Pant, S. D. <i>The Social Economy of the Himalayans.</i> ROSEMARY UPCOTT	97
Wauchope, Major R. S. <i>Buddhist Cave Temples of India.</i> H. G. RAWLINSON	85
Weling, A. N. <i>The Katkaris.</i> A. AIYAPPAN	140
Australia. Finlayson, H. H. <i>The Red Centre. Man and Beast in the Heart of Australia.</i> WALTER IVENS	38
Hambly, Wilfrid D. <i>Primitive Hunters of Australia.</i> RALPH PIDDINGTON	40
Täuber, C. <i>Entwicklung der Menschheit von den Ur-Australien bis Europa.</i> L. H. D. BUXTON	39
Biography. Marett, R. R. <i>Tylor.</i> A. I. RICHARDS	212
Schonfield, H. J. <i>Richard Burton, Explorer.</i> H. G. RAWLINSON	168
Eugenics. A Decade of Progress in Eugenics: Scientific Papers of the Third International Congress of Eugenics, held at American Museum of Natural History, New York. 1932. M. N. KARN	65
General. Arensberg, Conrad M. <i>The Irish Countryman.</i> J. H. HUTTON	231
Banks, Mrs. M. Macleod. <i>British Calendar Customs. Scotland. Vol. I.</i> R. A. S. MACALISTER	144
Glover, Edward. <i>The Dangers of being Human.</i> J. L. MYRES	128
Haslett, A. W. <i>Unsolved Problems in Science.</i> ARTHUR KEITH	108
Levy, H. <i>The Web of Thought and Action.</i> E. E. EVANS-PRITCHARD	126
Maran, René. <i>Le Livre de la Brousse; Roman.</i> J. L. MYRES	48
Newbigin, Marion I. <i>Plant and Animal Geography.</i> G. P. L. MILES	127
<i>Nutrition Policy in the Colonial Empire.</i> J. L. MYRES	145
Pillai, P. Chockalingam. <i>The Origin of the Indo-European Races and Peoples. Vol. I.</i> J. L. MYRES	66
Schaeffner, André. <i>Origine des Instruments de Musique.</i> DOUGLAS VARLEY	183
Linguistics. J. T. O. Barnard. <i>A Handbook of the Rawang Dialect of the Nung Language.</i> J. P. MILLS	18
Pacific. Andersen, Johannes C. <i>Maori Music with its Polynesian Background.</i> RAYMOND FIRTH	167
Harrison, T. H. <i>Savage Civilization.</i> JOHN LAYARD	166
Psychology. Raglan, Lord. <i>The Hero: a study in Tradition, Myth and Drama.</i> E. O. JAMES	105
Ritchie, A. D. <i>The Natural History of Mind.</i> E. J. BOOME	104
Religion. Frazer, Sir J. G. <i>Aftermath: a Supplement to the Golden Bough.</i> H. J. ROSE	101
McKerrow, James Clark. <i>Religion and History.</i> E. O. JAMES	102
Winthuis, J. <i>Mythos und Religionswissenschaft. P. W. Schmitt's "Methodologisches" Untersucht auf Wurzelkrankheit.</i> H. J. ROSE	103
Sociology. Childe, V. Gordon. <i>Man makes himself.</i> H. S. HARRISON	60
Gunther, Hans F. R. <i>Die Verstärkung: ihre Gefahren für Volkundstaut von Standpunkte der Lebensforschung und der Gesellschaftswissenschaft.</i> C. B. FAWCETT	25
Krzywicki, Ludwik. <i>Primitive Society and its vital Statistics.</i> A. M. CARR-SAUNDERS	63
Merchant, K. T. <i>Changing Views on Marriage and Family (Hindu Youth).</i> RAYMOND FIRTH	211
Sarkar, Benoy Kumar. <i>The Sociology of Population: a Study in Societal Relativities.</i> H. J. FLEURE	62
Steinmetz, Prof. S. R. <i>Gesammelte kleinere Schriften zur Ethnologie und Sociologie. III.</i> A. B. V. DREW	64
Thurnwald, Prof. Richard. <i>Die menschliche Gesellschaft in ihren ethnosozologischen Grundlagen. Vol. II.</i> IV. LEONHARD ADAM	24
Viljoen, Stephan. <i>The Economics of Primitive Peoples.</i> ROSEMARY UPCOTT	61
Williams, Faith M. and Zimmerman, Carle C. <i>Studies of Family living in the United States and other Countries.</i> A. B. V. DREW	210

PROCEEDINGS OF SOCIETIES.

	No.
British Association for the Advancement of Science, Nottingham, 1-8 September, 1937	190
British Spelæological Association. Second Annual Conference and Exhibition, Bristol, 23-26 July, 1937	192
Congrès International de Folklore. Paris 23-28 August, 1937	161
International Association for European Ethnology and Folklore : Edinburgh Congress, 14-21 July, 1937	191
International Congress of Anthropological and Ethnological Sciences : Meeting of the Permanent Council, Paris, 8 May, 1937	119
International Congress of Anthropological and Ethnological Sciences : Second Session, Copenhagen, 1-6 August, 1938. John L. Myres	224
Megalithic Monuments : Boyle Somerville Manuscripts	78, 94
Palæolithic Objects from Cresswell Caves	29
Reports from Local Correspondents	9
Dr. W. R. Morse	9
Professor Bernhard Eduard Petri	9
O. H. Bedford	9
The Rhodes Livingstone Institute of Central African Studies	180
Royal Anthropological Institute	
Ordinary Meetings. Myths and Dreams of the Baigas of Central India. VERRIER ELWIN	7
The Culture of the Mexican Highlands. MISS GUDA E. G. DUYVIS	8
Natives of the Western Desert of Australia. NORMAN B. TINDALE	34
The Swanscombe Skull. A. T. MARSTON, L.D.S., M.R.C.S.	35
The Nuer Family. D. E. E. EVANS-PRITCHARD	37
Death and Mourning Ceremonies at Normanby Island. DR. GEZA RÓHEIM	57
The Changing Environment of Africans. DR. E. B. WORTHINGTON	58
Asymmetrical Descent and Double Unilateral Affiliation. BRENDA Z. SELIGMAN	76
Double Descent in a Nigerian Semi-Bantu Community. PROF. C. DARYLL FORDE	77
Religion and Sacrifices of the Zahau Chins. H. N. C. STEVENSON	92
Social Symbiosis and Tribal Organizations. DR. S. F. NADEL	93
A Comparison of three Systems of Primitive Economic Organization. DR. KALervo OBERG	117
The Torguts of Etsin-gol. DR. GOSTA MONTELL	136
Among the Nuer and Koma Tribes of the Upper Nile. FRANK CORFIELD	137
Ethnology under Glass. (<i>Presidential Address.</i>) DR. H. S. HARRISON	138
West African Music. LAURA C. BOULTON	160
Australian Social Organization. PROF. A. R. RADCLIFFE BROWN	201
Recent Archaeological Developments in South Africa. A. J. H. GOODWIN	223
Applied Anthropology Committee	139
Report on Human and Other Remains in the 100-ft. Terrace at Swancombe	118
Report on Human Remains from Kanam and Kanjera, Kenya Colony	36
Second Congress of the Turkish Historical Society. Istanbul, 20-26 September, 1937. John L. Myres	225
Symposium on Earthly Man at Philadelphia : Some Impressions. V. Gordon Childe	162
University of Edinburgh. Tweedie Exploration Fellowship in Archæology and Anthropology	70

CORRESPONDENCE.

Amuletic Hands. MAJOR ERIK SEIDENFADEN	233
The Atagara of Idah on the Niger. H. R. PALMER	213
Baptism by Fire. A. M. HOCART	109
Bee-Keeping in the Wadi Du'an : A Correction. D. INGRAMS	154
Confinement at Puberty. A. M. HOCART	217
Cylindrical Beehives in Egypt and Cyprus. (<i>Illustrated.</i>) JAMES HORNEILL	153
Death and Mourning Celebrations on Normanby Island. J. H. P. MURRAY	172
G. ROHEIM	218
Eastern Himalayan Blood Groups. A. AIYAPPAN	219
Essay Prize for Egyptian Studies. G. A. WAINWRIGHT	51
Evolutionary Parallelism. A. M. HOCART	86
A Figurine Vase from 'Tiflis.' MAJOR D. H. GORDON	152
The Fire-Piston in South India. M. D. RAGHAVAN	169
S. S. SARKAR	215
Fire-Piston or Pestle? J. H. HUTTON	216
Fire-walking. A. M. HOCART	150
Friendship in North America. TRUMAN MICHELSON	111
Hathor and the Pharaoh. G. D. HORNBLOWER	234
An Initiation Sermon and its Text. (<i>Illustrated.</i>) G. N. N. NCNN	197
Solo Manuscript in the Bodleian Library, Oxford. CHUNGSHEE H. LIU	52
Modern Obsidian Artifacts from Southern Ethiopia. R. H. R. TAYLOR	171
More "Kernos" Vessels from Tiflis. A. BYHAN	146
JOHN L. MYRES	147
Myth and Ritual. A. M. HOCART	170
H. J. ROSE	214
LORD RAGLAN	236
Myth and Saga. H. J. ROSE	50
LORD RAGLAN	112

	No
The Origin of the Baganda Canoe. ADRIAN DIGBY	235
The Origins of Religion. RAFAEL KARSTEN	26
H. J. ROSE	27
Origin of Tri-clan and Marriage Classes in Assam. J. K. BOSE	110
Oryx and Ibex as Cult Animals in Arabia. H. R. PALMER	68
HENRY FIELD	69
Polyandry and Sexual Jealousy. (Illustrated.) A. AIYAPPAN	130
A Polynesian Wall of Coral in the British Solomon Islands. (Illustrated.) R. J. A. W. LEVER	151
Prehistoric Remains on Historic Sites of India and the Near East. (Illustrated.) SIMONE CORBIAT	185, 198
Prehistoric Remains on Historic Sites : A reply. MAJOR D. H. GORDON	232
Primitive Hunters of Australia. WILFRED D. HAMBLBY	148
RALPH PIDDINGTON	149
A so-called Minoan Vase from Macedonia. (Illustrated.) GEORGE E. MYLONAS	87
SYLVIA BENTON	88
The Stone Age Cultures of Uganda. T. P. O'BRIEN	129, 173, 237
E. J. WAYLAND	67, 184
Tattooing and Healing. A. M. HOCART	196
Two human figures from South America. (Illustrated.) ARTHUR G. HEMMING	53
ALFRED MÉTRACX	131

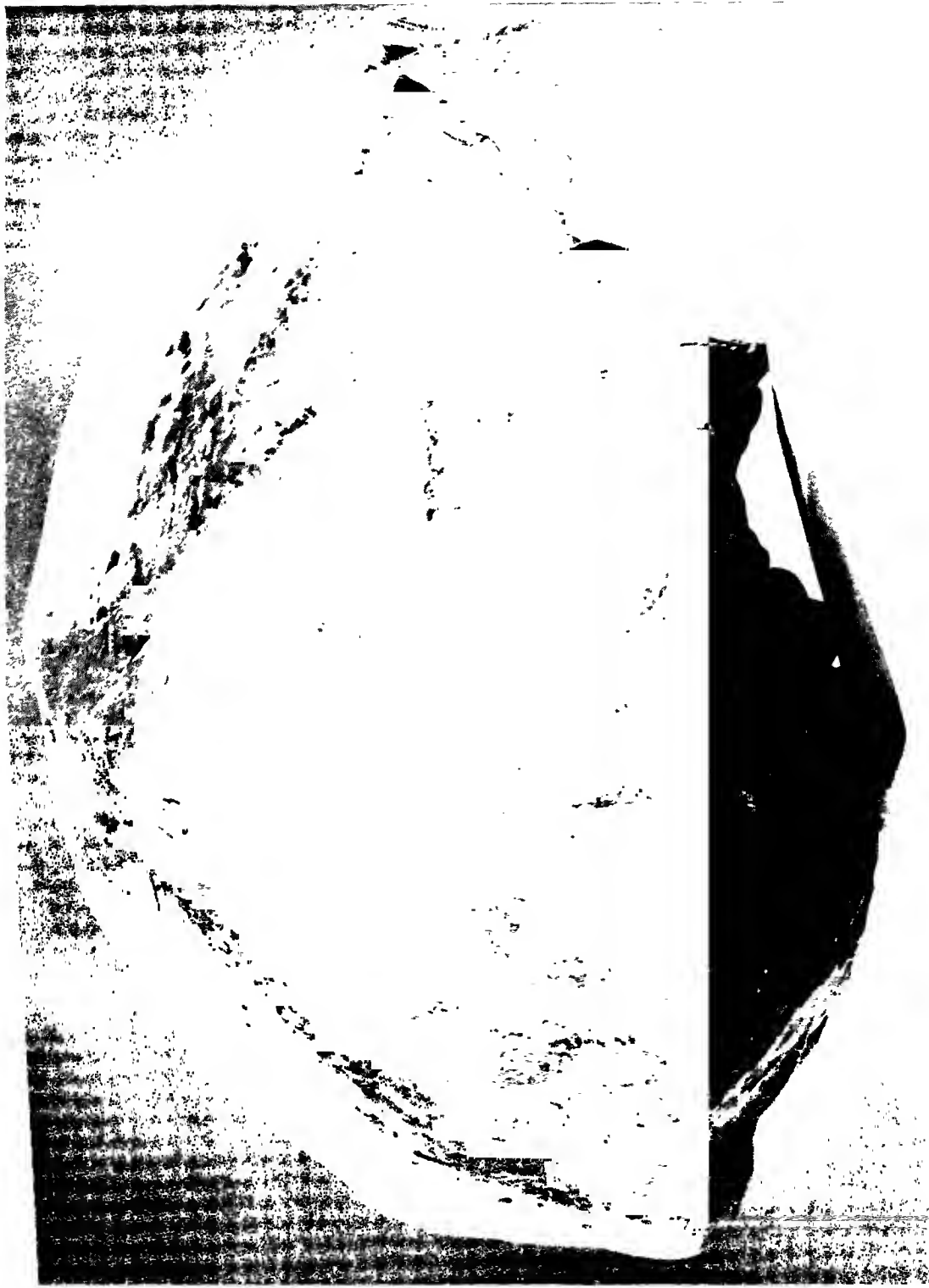
OBITUARIES.

Sergi, Guiseppe. L. H. Dudley Buxton	79
Elliot Smith, Sir Grafton, M.A., M.D., F.R.S., Litt.D., D.Sc., F.R.C.P. (with Plate C).	59
Iyer, L. K. Ananthakrishna. A. C. Haddon and F. J. Richards	120
Lebzelter, Viktor. G. M. Morant	95

ILLUSTRATIONS IN THE TEXT.

N.B.—Photographs, unless otherwise stated.

Norma lateralis of the Rhodesian Skull on the "Frankfort Plane." About half natural size (Fig. 1) (drawing)	With No. 1
Norma lateralis of Ngandong Skull VI. Same Orientation as the Rhodesian Skull (Fig. 1). Right view reversed. Half natural size (Fig. 2) (drawing)	1
Diagram of the Fifth Pithecanthropus Femur, from before (left) and from behind (right) (Fig. 3) (drawing)	1
Upper Figure : Endocranial Casts of Adolescent Sinanthropus $\times \frac{1}{2}$, Mesoecephalic Normal Man made to equal length. Inset : Microcephalic Man nearly $\frac{2}{3}$. Lower Figure : Endocranial Cast of Pithecanthropus Erectus $\times \frac{1}{2}$, and Chimpanzee made to equal length (Fig. 4) (drawing)	1
Upper Figure : Endocranial Casts of Pithecanthropus Erectus $\times \frac{1}{2}$, Mesoecephalic Man and Hylobates Agilis made to equal length. Lower Figure : Endocranial Casts of Mesoecephalic Dutch Man, Chimpanzee, Orangoutan, Hylobates Agilis, Cebus and Midas made to equal length (Fig. 4) (drawing)	1
Chisel, actual size, Hammer, actual size (drawing)	2
Coarse Drill (drawing)	2
Circular Ornaments of Stone : France (Fig. 1)	4
Ibex Hunters' Dance at Dammön (Fig. 1)	6
Stone with Ibex Head and Inscription at Tarim (Fig. 2)	6
A Beadworker of Ilorin	28
A Glazed Vessel with Figurines, from Tiflis (Fig. 1)	31
A Beehive in Wadi Du'an (Fig. 1)	33, 154
Swarming Apparatus (Fig. 2)	33
Stone Figure from Bolivia (Fig. 1)	53
Female Clay Figure from Bolivia	53
A Ngawn Hunter (Fig. 1)	56
The Headman of Satawm (Fig. 2)	56
Pot-making (Fig. 3)	56
Millet for Preparation of Beer Drying on Mats (Fig. 4)	56
Sketch Map of Lundazi District and its Neighbourhood (Fig. 1) (drawing)	74
Late Helladic Vase from Tell Duwier, Palestine (Fig. 1)	75
Helladic Vase, in position as found in a Sealed Deposit with Local Palestinian Pottery (Fig. 2)	75
Guiseppe Sergi (1841-1936)	79
The Vase from Olynthus (Fig. 1)	87
Another View of the Vase from Olynthus (Fig. 2)	87



'NORMA LATERALIS' OF NGANDONG SKULL VI: (Cast).

SAME ORIENTATION AS THE BEADMAN SKULL, FIG. 1, PLATE PHOTOGRAPH.

Not to scale.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 1-29

JANUARY, 1937

ORIGINAL ARTICLES.

Physical Anthropology.

With Plate A.

Dubois.

ON THE FOSSIL HUMAN SKULLS RECENTLY DISCOVERED IN JAVA AND PITHECANTHROPUS ERECTUS. *By Professor Eugène Dubois.*

FIRST PROPOSITION :—Judging from the fossil skulls, *Homo soloensis*, discovered in Java, is really human, and proto-Australian. He has nothing in common with *Pithecanthropus*. Solo-Man and Rhodesian Man—another proto-Australian, which closely resembles Solo Man, though discovered in South Africa—are representatives of the most primitive type of the species *Homo sapiens* and well distinct from *Homo neanderthalensis*, the other human species.

The perfect humanity, and at the same time the distinctness as a species, of *Homo neanderthalensis* is now well established. This was a man, short of stature but sturdily built. The limb bones were extraordinarily thick. The cranial capacity was large, surpassing that of the European. Neanderthal Man was, moreover, distinguished by the peculiar width of the pulp cavity of the teeth ("taurodontism" of Keith). The Australian aborigine, who is generally regarded as the most primitive living representative of *Homo sapiens*, the other human species, is, on the contrary, slim and slenderly built, with long and thin limb bones (and muscles). His pulp cavities are narrow ("cynodont") like those of all the races of modern man. His mean cranial capacity is much below the European mean.¹ These contrastive somatic characters may also be considered to distinguish the species in a more primitive state.

The first discovery in Java of a fossil man seemingly somewhat more primitive than the Australian aborigine was that of the Wadjak man, found in the southern limestone range. I recognized these skulls as Australoid in 1890, and when describing them fully, but not completely, in 1920 called the individuals 'proto-Australians'. Of the two skulls the first found is the more complete, but the fragmentary skull No. II is morphologically more primitive, and this fossil is particularly remarkable owing to the maxilla and mandible, which are among the largest known at present. The mandible (of the *sapiens* type) is not less robust than the Neanderthaloid Heidelberg-jaw. The long bones of the skeleton found with the skulls are of the Australian type, and so are the teeth.²

The later discoveries in South Africa and Java were more surprising. The most remarkable, since it is the most divergent, of all known human fossil skulls was found in 1921 at Broken Hill, in Rhodesia, north of the Zambesi. Judging from the pulp cavities of the teeth, from the straight and rather slender limb bones accompanying the skull, from the peculiar nuchal plane of the occipital bone, and above all from the low cranial capacity, this certainly is no *Homo neanderthalensis*, but a *Homo sapiens* and a proto-Australian. The cranial vault of this *Homo rhodesiensis* is as low as those of the most typical Neanderthaloid skulls. The forehead of the African specimen is even flatter and more receding and gorilloid than theirs, and its enormous *torus*

¹ Eug. Dubois, "The Seeming and the Real Cephalization of the Australian Aborigine." *Proceedings Koninklijke Akademie van Wetenschappen te Amsterdam*, Vol. 36 (1933), p. 2.

² ———, "The Proto-Australian Fossil Man of Wadjak, Java." *Ibid.*, Vol. 23 (1921), p. 1013.

supraorbitalis is even more extreme in form, but this torus is here clearly compounded from a right and a left arch separated by the less projecting glabella region, in contrast with the more or less continuous torus of the Neanderthaloid crania. This form of torus reminds one of the strongly developed *arcus supraciliaries* on not a few Australian skulls, and even on some rare European specimens. The shape of the occipital bone of the Rhodesian skull is most peculiar. The nuchal plane of the squama of the occipital, serving for attachment of the neck muscles, is surprisingly wide and flat. The squama is sharply bent in the region of the *protuberantia occipitalis* and superior nuchal lines, by which bending a *torus occipitalis transversus* came into existence, resembling that of anthropoid apes and some Australians.³

Very remarkable, also, are the fossil skulls, found in 1931 and 1932, in a terrace of the Solo River, at Ngandong, 10 km. N.E. of Trinil, where from very much older fluvial deposits *Pithecanthropus* was excavated.⁴ Within an area of 55 x 30 metres remains of eleven human skulls were found. The only limb bones found with them are two fragmentary tibiae which do not betray affinity with *Homo neanderthalensis*, according to a letter from the discoverer, Mr. W. F. F. Oppenoorth, mining engineer, late leader of the Geological Survey

³ W. P. Pyecraft and others, *Rhodesian Man and Associated Remains*. British Museum (Natural History), London (1928).

⁴ W. F. F. Oppenoorth, "Homo (Javanthropus) 'soloensis, een pliocene mensch van Java.'" *Mededeelingen Dienst Mynbouw in Ned.-Indië*. Batavia (1932).
 — "De vondst van palaeolithische menschen-schedels op Java." *De Mijnningencour*, Juni, 1932. Bandoeng.

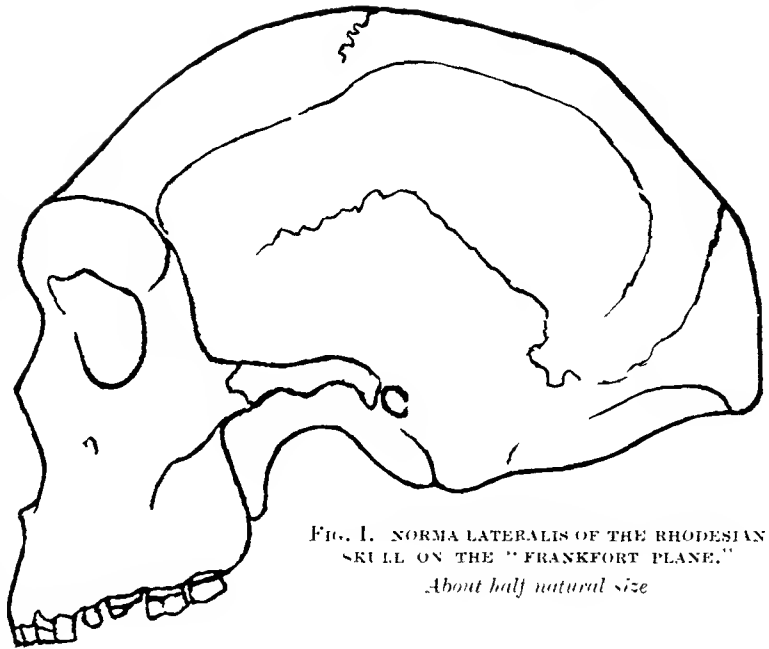


FIG. 1. NORMA LATERALIS OF THE RHODESIAN SKULL ON THE "FRANKFORT PLANE."

About half natural size

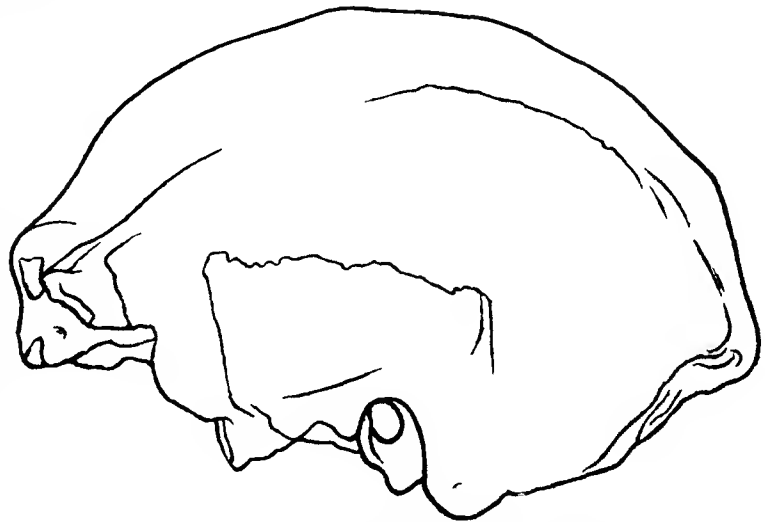


FIG. 2. NORMA LATERALIS OF NGANDONG SKULL VI. SAME ORIENTATION AS THE RHODESIAN SKULL, FIG. 1. RIGHT VIEW REVERSED.

Half natural size.

of Java. So far as is made known, all the skull remains belong to the neurocranium. From the three most complete skulls (numbered I, V and VI) only No. VI (not yet described) has the base intact. Moreover, the best-preserved skulls are much damaged, probably as a result of head injuries. The surfaces, furthermore, appear weather-worn and they were, perhaps, worn also by water-borne sand

in the river. Happily, the striking resemblance of some of the Ngandong skulls to the Rhodesian skull enables us to picture their original intact state. The discoverer describes this fossil man, typified especially by skull No. I, as *Homo soloensis*, and he emphasises the resemblance to the Wadjak-skull No. I, to a certain typical Australian skull and to the Rhodesian skull. The differences from the Neanderthaloid type are also emphasised. This *Homo soloensis* is, undoubtedly, a proto-Australian, and the resemblance to the Rhodesian type is really *striking*. The skull No. VI, although clearly of identical type, is provided with a 'good' forehead and it is probably female: Nos. I and V show male features, like the Rhodesian fossil. It is a highly important fact that in all four of these skulls, from Java and South Africa, female and male, we not only meet with the same peculiar shape of the *planum nuchale*, but also find the same relative height of the cranial vault above the *meatus acusticus*. On the other hand, in the Wadjak-skull No. I, with the same cranial length, the height of the vault is about 2 cm. more, in conformity with the relative height of Australian skulls. At the same time, the shape of the nuchal plane of Wadjak No. II is different from that of Wadjak No. I, and this feature is variable in the Australian aborigine.

In my opinion, *Homo soloensis* (Oppenoorth) and *Homo rhodesiensis* (Smith Woodward) are (with *sinanthropus*) the most important of all known fossil men, because they represent the most primitive type of the species *Homo sapiens*, to which belong all the races of man living at present. The Australian aborigine has conserved much of the primitive somatic character, especially the fundamental and therefore most distinctive quality of any mammalian organism, the characteristic brain volume. Indeed, the influence of culture, by means of which the Australian could better provide for the necessities of life and hence improve somewhat his originally poor constitution, had little influence on this principal quality of the organism. Because of its great significance, I have studied this quality of the Solo-man by means of the casts of the Ngandong skulls, kindly placed at my disposal by Professor van den Broek and Mr. Oppenoorth, and by means of data concerning *Homo rhodesiensis* and the Australian aborigine.

For the average cranial capacity of the

Australian aborigine we may assume, according to the best sources, 1,295 c.cm. in the male sex and 1,146 c.cm. in the female.¹ The capacity of the Rhodesian skull, measured by Sir Arthur Smith Woodward was 1,280 c.cm. For Ngandong skull No. I Oppenoorth calculated a probable capacity of ca. 1,200 c.cm.⁴ (1,140 c.cm. real *volume* according to the method of Welcker: 1,227 c.cm. according to the method of Manouvrier); for Ngandong No. V, measured with dry sand, Oppenoorth found ca. 1,300 c.cm. Trying to obtain more accurate results, I measured the internal length, breadth and height on an endocranial cast of the Ngandong skull No. I, the height being calculated from the *meatus acusticus* ('porion'), on the skull, and found by means of the formula of Frobiep,

$$\text{capacity} = \frac{L \times B \times H}{2},$$

a volume of the cranial

cavity of 1,143 c.cm. Comparing these internal chief linear dimensions of the Ngandong skull No. I with those of the cast of the cranial cavity of *Homo rhodesiensis* I found 1,150 c.cm. for the first. Applying the method of Frobiep to the Rhodesian endocranial cast I obtained 1,272 c.cm., which is very near to the measured capacity of 1,280 c.cm. We thus may safely assume 1,150 c.cm. for the cranial capacity of Ngandong Skull No. I. The features of this skull betray a male, in accordance with Oppenoorth's original opinion. For the exceptionally large and certainly male skull No. V, I calculate 1,284 c.cm., rounded off to 1,295 c.cm. This gigantic skull has thus only a capacity equal to the average male capacity of the Australian aborigine. For the Ngandong skull No. VI, to all appearance female, though relatively large, I find 1,087 c.cm. rounded off to 1,095 c.cm.

From this it is apparent that the proto-Australian of Ngandong in Java, and the proto-Australian of Broken Hill in South Africa, had a somewhat smaller brain volume than the Australian aboriginal of to-day. Assuming for the average cranial capacities of the male and the female *Homo soloensis* 1,200 and 1,050 c.cm., respectively, we find a difference of 95 c.cm. to the benefit of the present Australian—a difference which may easily be accounted for by the influence of culture as interpreted above. In this way we find conformity in this primitive *Homo sapiens* type.

However, considering the great distance of

Rhodesia from Australia and Java; the gorilloid features of the Broken Hill skull; its seemingly Neanderthaloid features combined with slender limb bones and cynodont pulp cavities; the carious (hollow) teeth of this savage;⁵ and the accompanying recent fauna, all this evidence was so perplexing that the anthropologists did not know what to do with this fossil man.

Now, after the discovery of the Ngandong man, there is hope that the history of Neanderthal man will be repeated, in a sense: that in the same way as the discovery of the Spy skeletons legitimatised the fossil man from the Neanderthal cave, the Ngandong skulls will legitimatise the fossil Rhodesian man.

The occurrence of the same human race in Java and in South Africa, separated by the whole Indian Ocean, does not appear so surprising, if we call to mind the fact that the Malayan Hovas have resided since immemorial times, in Madagascar, which is very near to the southern part of the African continent. In a much earlier, but geologically still recent, time Solo-descendants may have reached the continent by the same route, aided by the Southern Trade-wind Current. And if, judging from the slight degree of fossilization of the skull, and from the recent character of the accompanying fauna, we have to attribute, indeed, a very young age to the deposit in which the Rhodesian fossil man was found, numerous facts are recorded which point to post-Trinil geological age of the fossil Solo-man. In this respect we have to consider that the remains of not less than *eleven* partly mutilated skulls were found, together with only *two* tibiae representing the limb bones, within a very small area

of a terrace of the present-day river. Some not archaic looking implements, hammer-stone balls (resembling the two found with the fossil remains of Rhodesian man, and probably used for grinding some kind of corn); and caudal spines of Ray (probably used as dart or arrow-heads) were supposedly found with them, and bone harpoons came from terraces of about the same, or a little younger, age. Note that the cavities and fissures of the skulls were filled with sand and fine-grained gravel of volcanic petrographic character—the principal sediment of the Solo-river still to-day—which is and was derived from the erosion of the volcanic tufa which chiefly constitutes the Trinil deposits. This filling had been cemented by impregnated lime, which is never met with in the original tufa itself. These geological facts point unquestionably to a post-Trinil geological age, but not to contemporaneity of Rhodesian man and Solo-man, notwithstanding archæological appearances.

Oppenoorth (1932) was inclined to consider the Ngandong terrace to be of mid-Pleistocene age, on somewhat unsubstantial grounds. According to Dr. von Koenigswald (1935) it should be late Pleistocene judging from his classification of the fossil fauna of Java.⁶ Dr. van Stein Callenfels (1936) is of opinion that such a bone harpoon in itself should suffice to place the skulls of Ngandong somewhere about Mesolithic times.⁷ However the question of the age of this fossil man may be settled, I feel obliged to say that undoubtedly, in my opinion, not a single one of the deer horns figured by Oppenoorth (1936)⁷ and van Stein Callenfels (1936)⁸ can claim to be a real artifact. Moreover, they presumably are fossils from the Trinil-horizon.

SECOND PROPOSITION :—*Pithecanthropus* was not a man, but a gigantic genus allied to the Gibbons, superior to its near relatives on account of its exceedingly large brain volume, and distinguished at the same time by its erect attitude.

It was the surprising volume of the brain—evidenced by the size of the fossil calvaria which is very much too large for an anthropoid ape, and which is small compared with the average, though

not smaller than the smallest, human brain—that led to the now almost general (although,

⁵ Erich Günther, "Die Zahnkaries ein Produkt der Zivilisation?" *Die Umschau*, Heft 31. 40 Jahrgang, p. 601. Frankfurt a/M. (1936). "Tooth caries begins with the transition to agriculture and cattle-breeding. Responsible is chiefly the finer preparation of the food, especially of the bread."—See also Sir Arthur Keith, *Antiquity of Man*. New Edition (1925), pp. 400–401.

⁶ G. H. R. von Koenigswald, Die fossilen Säugetierfaunen Javas. *Proc. Kon. Akad. v. Wetensch. Amsterdam*, Vol. 38 (1935), p. 191.

⁷ W. F. F. Oppenoorth, "Een prehistorisch Cultuurcentrum langs de Solo-rivier." *Tijdschrift van het Koninklijk Nederlandsch Aardrijkskundig Genootschap*, Deel. 53, p. 399.

⁸ P. van Stein Callenfels, "L'Industrie osseuse de Ngandong." *L'Anthropologie*, Tome 46, (1936), p. 359.

in my opinion, erroneous) view that the 'Ape-Man' of Trinil, Java, was really a primitive Man. Morphologically, however, the calvaria closely resembles that of anthropoid apes, especially the gibbon. The name *Pithecanthropus* for the genus, thus seemed fully appropriate. The name *erectus* was given to the species on account of the strikingly human-like essential features of the femur, which imply erect attitude and gait. Together with these features, however, the 'Trinil femur,' in the opinion of the author of the 'species,' presented important differentiating characters, which convinced me that the ape-like skull and the human-like femur may have been parts of one organism. At the same time, almost conclusive indirect evidence in favour of the association of the two fossils was that they were excavated from exactly the same layer of the fluvial deposit of volcanic ashes, the distance between them being about 12 metres.

This question was settled in 1932, *i.e.*, 40 years after excavating the first femur, when I recognized, in the old Trinil collection, four more or less fragmentary and superficially eroded femora which are similar to the type specimen. All five femora are unquestionably from the same species, though four were excavated in 1900.

Although fragmentary, these four new femora—I recognised a fifth new fragment in 1935, but this is from Kedung Brubus, 40 km. east of Trinil—are extraordinarily important, because on them corrosion, by removing the superficial or periosteal bone layer, has laid bare the internal structure of the shaft wall.⁹ This deeper shaft structure is entirely different from the human one, and betrays a muscular function and a locomotion which, although facultatively erect and human-like on the ground, was also arboreal, and perhaps on uneven ground a perfection of the semi-erect gait of the gibbon. Thus the evidence given by those five new thigh bones of the morphological and functional distinctness of *Pithecanthropus erectus* furnishes proof, at the same time, of its close affinity with the gibbon

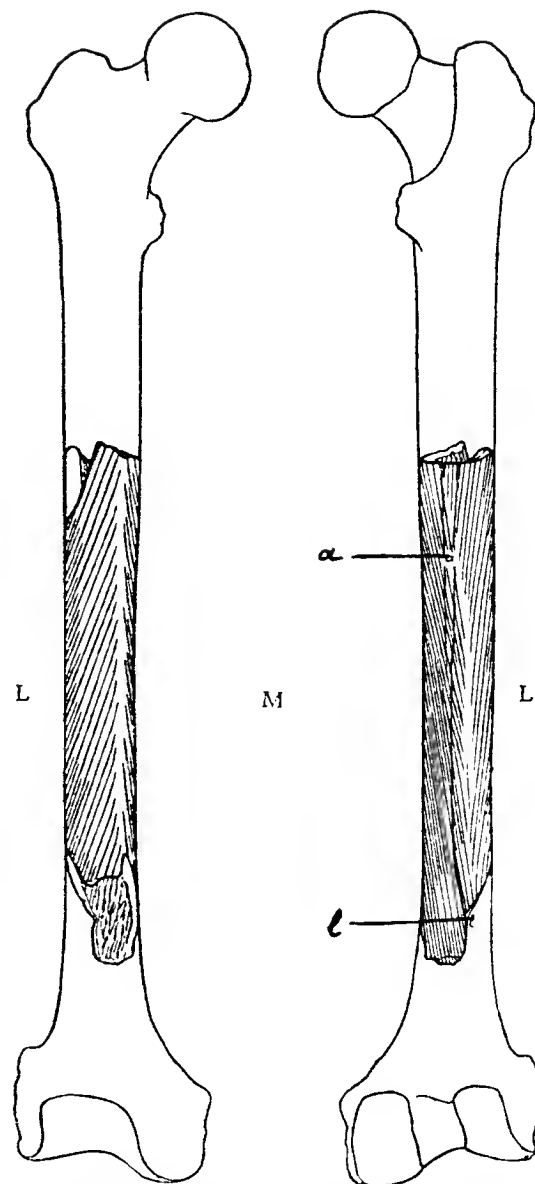


FIG. 3. DIAGRAM OF THE FIFTH *PITHECANTHROPUS* FEMUR, FROM BEFORE (LEFT) AND FROM BEHIND (RIGHT). THE FRAGMENTAL SHAFT, LOCATED IN THE OUTLINED ENTIRE RIGHT FEMUR: ONE-THIRD NATURAL SIZE. (M), MEDIAL SIDE; (L) LATERAL SIDE; (a), LINEA ASPERA (b) ITS DIVERGENT LABIUM LATERALE

⁹ Eug. Dubois, "The distinct organization of *Pithecanthropus*, of which the femur bears evidence, now confirmed from other individuals of the described species," *Proceed. Kon. Akad. v. Wetensch. Amsterdam*, Vol. 35, p. 716 (1932).—"New Evidence of the distinct organization of *Pithecanthropus*," *Ibid.*, Vol. 37, p. 139 (1934).—"The sixth (fifth new) femur of *Pithecanthropus erectus*," *ibid.*, Vol. 38, p. 850 (1935).

group of anthropoid apes. The gibbon-like appearance of the 'Ape-Man' is clearly evident by the general form and many morphological details of the skull.¹⁰ A close comparison in this

¹⁰ Eug. Dubois, On the Gibbon-like Appearance of *Pithecanthropus erectus*, *Proc. K. Ak. Wetensch. Amsterdam*, Vol. 38, p. 578 (1935).

respect with the chimpanzee, on the other hand, reveals great differences. The absence of *sinus frontales* in the Gibbons, and its marked development in *Pithecanthropus* we may consider to be a difference of the same character as between the Common Hippopotamus and the Pigmy Hippopotamus (*Choeropsis*). In *Pithecanthropus*, in contradistinction to man, the gravitational centre of the head was certainly a considerable distance in front of the condyles, judging from the morphological features of the calvaria. Hence there was no parietal vertex of the brain, this vertex being a distinctive character of man (including *Sinanthropus* and also microcephali). In this respect *Pithecanthropus* agrees entirely with the gibbons and the chimpanzee.¹¹ Both features undoubtedly signify, that in *Pithecanthropus*, in distinction to man, the head was not poised on the vertebral column. The mandible (from Kedung Brubus, where also a femur was found) most resembles that of the gibbons, so far as its features are anthropoid. One of these, the extensive depression for the anterior attachment of the digastric muscle, shows that *Pithecanthropus* was devoid of the human power of speech.

The strongest evidence of the gibbon-like appearance of *Pithecanthropus*, and of its near relationship to this group of anthropoid apes, however, is that given by the volume of the cerebrum. This is exactly twice that of an imaginary siamang gibbon with the body weight of *Pithecanthropus*, as computed from the chief dimensions of the femora.¹⁰

This surprising brain volume is indeed the most conspicuous, and the most important, distinctive feature of *Pithecanthropus erectus*, and it was to obtain a better insight into this new organism, that soon after the discovery, I undertook the search for laws which regulate cerebral quantity in mammals, and entered into studies, which should furnish evidence as to the place of

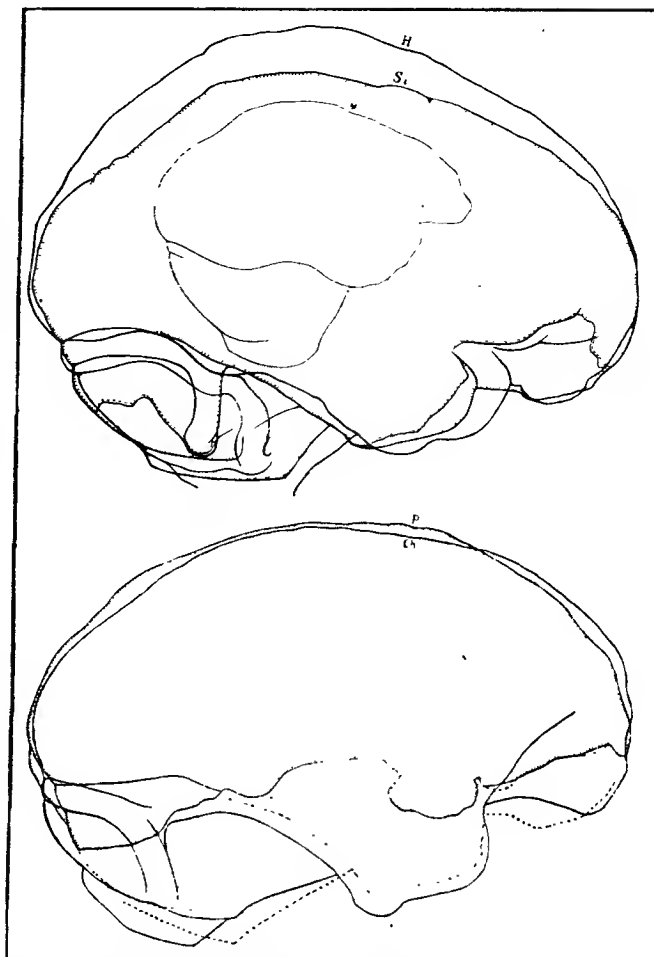


FIG. 4. Upper Figure: ENDOCRANIAL CASTS OF ADOLESCENT *SINANTHROPUS* (Si), $\times \frac{1}{2}$, MESOCEPHALIC NORMAL MAN, DUTCH (H), MADE TO EQUAL LENGTH. INSET: MICROCEPHALIC MAN (M), NEARLY $\frac{2}{3}$.

Lower Figure: ENDOCRANIAL CAST OF *PITHECANTHROPUS ERECTUS* (P), $\times \frac{1}{2}$, AND CHIMPANZEE (Ch), MADE TO EQUAL LENGTH. BOTH FIGURES ARE DIAGRAMMATIC DRAWINGS (TELEPHOTOGRAPHIC OUTLINES) OF RIGHT NORMA LATERALIS VIEWS. SUBFRONTAL (ORBITAL)—SUBOCCIPITAL (CEREBRAL PLANE) ORIENTATION.

Proc. R. Acad. Amsterdam XXXVI, 1933, Pl. III.

¹¹ Eug. Dubois, The Shape and the Size of the Brain in *Sinanthropus* and in *Pithecanthropus*. *Proceed. Kon. Akad. v. Wetensch. Amsterdam*, Vol. 36, p. 415 (1933). The small cranial capacity of the probably female *Sinanthropus II*, recently confirmed by Franz Weidenreich (*Palaeontologia Sinica*, Series D, Vol. VII, Fascicle 4, 1936), now induces me to reconsider, in this case, the significance of taurodontism as a neanderthaloid character, and to regard *Sinanthropus*, on account of the close agreement of the cranial capacity and shape of the encephalon, as also the similarity of the peculiar tympanic plate, as of identic race with *Homo soloensis*, i.e., a very primitive *Homo sapiens*.

Pithecanthropus erectus in the zoological system. They led, finally, to the law of progressive cerebration by great leaps (mutations), the law that the phylogenetic growth of the cerebrum proper—or psychencephalon, the most central part of the nervous system—excited by modifications of the animal functions ('specialization') was automatically discontinuous, the volume, and the number of the nerve cells increasing by abrupt doubling, which implies progressive organization by degrees.

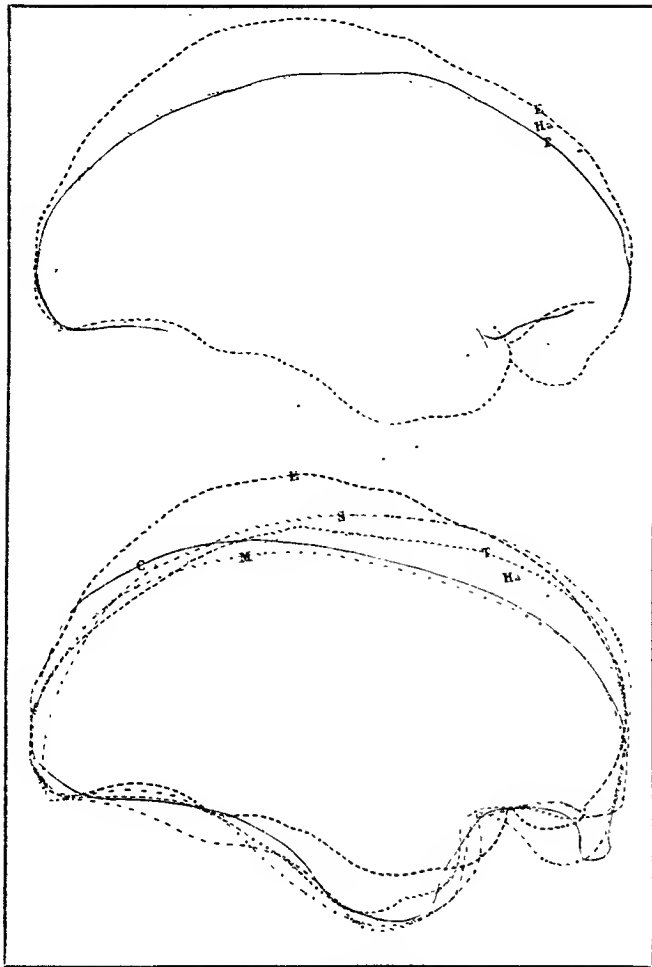


FIG. 5. Upper Figure: ENDOCRANIAL CASTS OF *PITHECANTHROPUS ERECTUS* (P). $\times \frac{1}{2}$, MESOCEPHALIC MAN (E), AND *HYLOBATES AGILIS* (Ha). MADE TO EQUAL LENGTH.

Lower Figure: ENDOCRANIAL CASTS OF MESOCEPHALIC DUTCH MAN (E), CHIMPANZEE (T), ORANGOUTAN (S), *HYLOBATES AGILIS* (Ha), *CEBUS* (C), AND *MIDAS* (M). MADE TO EQUAL LENGTH WITH P OF THE UPPER FIGURE. BOTH FIGURES DIAGRAMMATIC DRAWINGS (TELEPHOTOGRAPHIC OUTLINES) OF RIGHT NORMA LATERALIS VIEWS. SAME ORIENTATION AS IN FIG. 4.

Proc. R. Acad. Amsterdam, XXXVI, 1936, Pl. IV.

Nigeria.

BEAD WORKERS OF ILORIN, NIGERIA. By F. Daniel.

2 The beads known in Ilorin as *Lantana* are made from a kind of red jasper which is brought by traders from Litingo in the Upper Volta, French Territory. The stone is carried down the Niger by canoe to Jebba, thence by railway or headload to Ilorin.

The process of bead making is as follows:—

The stone is gripped between the first and great

Applying this law to *Pithecanthropus*, by comparing this fossil Primate with the anthropoid apes, especially the gibbons, and with man, on the other hand, we find our Second Proposition entirely confirmed.

This comparison more than confirms the opinion of Marcellin Boule, pronounced fifteen years ago, that *Pithecanthropus* may have been a large gibbonoid species, distinguished from its congeners by those important particular characters which at the time were known to Boule.¹²

Finally, it may be remarked, that *Pithecanthropus erectus* may well have been submitted to transformation (in the sense of William K. Gregory)¹³ towards human organization, needing only a slight modification of the function and corresponding form and structure of the femur, and therewith the other parts of the lower limb, correlated with a similar, but not greater, modification of the function and form of the upper limb.

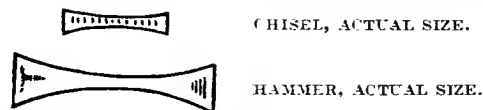
Postscript:—Soon after forwarding the manuscript of this paper I had occasion, by the kindness of Professor Rutten and Professor Van den Broek, of Utrecht, to examine a cast of the fossil child skull, discovered in Java, February, 1936. This skull, recently described in *Proceed. Kon. Akad. v. Wetensch. Amsterdam*, Vol. 39, No. 8, 1936, pp. 1000-1009, by G. H. R. von Koenigswald: "Erste Mitteilung über einen fossilen Hominiden 'aus dem Altpleistocän Ostjawas,'" under the name *Homo modjokertensis*, is, in my opinion, undoubtedly from a young child of *Homo soloensis*. The most convincing proof of this identity is the similarity of the peculiar tympanicum.

¹² Marcellin Boule, *Les Hommes fossiles. Éléments de Paléontologie humaine*, p. 109. Paris, 1921.

¹³ William K. Gregory, *The Rôles of Undeviating Evolution and Transformation in the Origin of Man*, *American Naturalist*, Vol. 69, pp. 385-404. New York, 1935.

Daniel.

toes of the operator, and held firmly against a pad of cloth. It is then chipped roughly into



shape. The instruments used are a small chisel

and a double-headed hammer, like a miniature dumb-bell.

The next process is piercing. The stone is held by the toes as described before, and a hole is gradually drilled or, rather, chipped through, first from one end, then the other, till the two meet in the middle. The same hammer is used, and a series of punches of nail shape.

A coarse drill is used to start with and is changed for a finer as work progresses. The drill is occasionally lubricated with a little palm oil. A piece of cloth is now folded into a pad, and the stone is gripped with both hands and worked with a vigorous left to right movement across the face of the grinding stone. This is a slab of hard schist brought from Iggetti about 30 miles north of Ilorin. Considerable force is needed, and the full strength of the operator's back and arms is brought to bear. This process produces a powder which is mixed with water and serves as a



lubricant for the final polishing on a smooth board, about 2 feet long and a few inches wide. Small holes and flaws are repaired with gum and, if necessary, flakes are affixed. The beads thus produced are of various shapes, cylindrical, elliptical and round. Ear-rings of cylindrical form are produced in exactly the same way with the omission of the piercing process, and are worn in a hole bored through the lobe of the ear. The finished bead sells from 2*d.* to 2*s.*, according to size and quality.

The beadworkers are of both sexes and all Yorubas. They say their ancestors came from Old Oyo, the ancient Yoruba capital, which was sacked by the Fulani about 100 years ago. Formerly the Lantana beads were in great request for the regalia of the chiefs in the Southern Provinces, but the demand has now declined. The process is extremely laborious and the finished article of small value. In 1921 it was estimated that there were 500 bead-workers in Ilorin. In 1934 there were 28 and in 1935 the number has been reduced to 15. [See also illustration, MAN, 1937, 28.]

Africa: West.

THE PORO IN MODERN BUSINESS: A Preliminary Report of Field Work. By Geo. W. Brown.

3 The Poro Society in West Africa is usually considered as a religious institution, remarkable for the peculiar character of the initiation ceremony imposed for entry upon its members. My recent investigations in Western Liberia have revealed that in these days, at all events, the Poro Society acts as a co-ordinator of native industry and an economic *entrepreneur* over a fairly wide and well defined area.¹

High up in Western Liberia the African is a great trader. He likes the gossip of the market place, where he meets old friends from afar, and loves to parade his attractive self in his flowing

bright striped gown before strangers and the women who come either to sell or buy. He thrills to the chance of bargaining over native merchandise which he displays with pride or fondles in sensitive fingers. Though his scale of values may be different, he relishes a good profit in the same manner as do his western colleagues.

Significant social values, such as tribal popularity, personal fame and district prestige adhere to the village with an enviable reputation as an active market place, and to its chief. Home towns of Paramount Chiefs and leading men are likely, therefore, to be identical with important market centres. One aspect of village interest in its own market is the designation of an animal or bird as a trading mascot. The creature, usually a goat, is selected by the Chief and the elders, designated in a sacrificial ceremony as a *sola*, and released to run, at will and unmolested, in order that the Chief may live long and that trading may prosper in the village. Once a week the smaller markets, catering to village wants, are held either in a town or between two towns. The larger markets circulate through a number of villages on specified days. Large or small the

¹ Two recent investigations refer to the educational, political and social functions of the Poro, but not to its economic adaptation. James L. Sibley, *Liberia*, New York, 1928, calls attention to the Poro as an institution for instructing boys and girls in social duties, sexual responsibilities and industrial crafts.

Mr. Aboyomi Kargbo refers to the Poro as 'a secret organization and used for the most part (besides its real secret order) in giving liberal education to the youths of the land. It taught also history, industry and the simplest arts of manufacture. As a political organization the Poro was a very potent factor.' See *History of Liberia*, Liverpool, 1926, p. 4.

native markets are under the control of the chiefs and, to a more varied degree, the direction of the Poro Society.

In the area formerly dominated by the Kubla kings and around Vanjama the Poro society exerts its widest control over native marketing and industry. Vanjama itself is the market core of the most complete industrial unit in indigenous economy among Africans in Liberia. Weaving was the basic industry which gave rise to this cycle of production and marketing, though this section was famous for textile activities long before it became part of the present commercial unit. The Mendi and Gbandi people in this area joined together under the direction of the Poro to produce country cloths and gowns. Activity in these enterprises lead to manufacture, within the same industrial unit, of other necessities for village life.

Leading tribesmen collaborating with Poro officers designate the work of each village. The Gbandi plant cotton fields, and their villages are known among Africans as cotton-growing towns. They plant their food crops at the same time, but not in the field with the cotton as is the case almost everywhere else. Without exception this cotton is never considered a product for family or tribe consumption. Its specialized industrial character is proudly preserved. When the women have picked and carded the cotton it passes on to the next town. A full record of the quantity is reported to and kept by the Chief and the Poro.

In a second town the women spin the cotton into thread. This town collaborates with a small 'half-town' across the frontier in Sierra Leone, where they manufacture dye, and dye the threads. When an established town throws off a few huts near to the farms or industrial fields in order to facilitate storage or production, this dependent settlement, whether occupied seasonally or permanently, is known by the native name of 'half-town.' The dyed thread then goes back into Liberia to the weaving town, which is the third specialized process in cloth manufacture. Here the thread is woven into strips either four, eight or twelve inches wide and averaging in length between twenty and twenty-five feet. These go to a 'half-town' of tailors who make the strips into gowns, country cloths, caps, 'lappas' (skirts), and 'booppas' (blouses). What finished cloth is not exchanged in the direct purchase of pots, knives and hoes, from other

towns in the ring, is taken to the public market which moves through the circle of larger villages in the association. Merchandise on sale there comes almost entirely from towns within the ring.

Vanjama is the principal centre of leather goods production. Craftsmen of this village tan the skin of goats, cows and deer, dye the leather, and make boots, shoes, slippers, tobacco pouches, pocket books and scabbards for knives and swords. Bridles, saddles and flexible leather whips come down from tribes in the North to be sold and bartered at the markets. Knives, cutlasses, farm tools and pottery come from villages in the unit. In the Mendi 'half-town' where the threads are dyed, men and women manufacture clay pots, jugs, and bowls of all descriptions for carrying water and cooking.

In the market at Vanjama currency and coins are not permitted. There is no exception. Back in the bush is the Vanjama Bank, operated by the Poro society. Market customers go first to the banker and exchange their Western money for Vanjama market money—bars of twisted iron. A small percentage is charged by the banker for this exchange. In the market place all articles are priced in bars of iron, and any item displayed is sold for a specified amount of this medium of exchange. Any purchase, from kola nuts to cows, is paid for in pieces of iron. Amounts left over may be returned to the bush Bank and redeemed in cash.

This Poro controlled system of exchange completes the economic unit. The society supervises the work in weaving, blacksmithing, leather work, basketry and pottery which are the major industries. Through the leading men of the market it shares in setting the price of articles, whether cheap or valuable. In subdividing and allocating industries among the village members of the industrial unit it considers the natural advantages of the area and the benefits to be obtained from specialization. The abundant supply of most suitable clay led the Poro to induce pottery workers to build a few huts and reside near the centre of their supply of raw material. Rising superior to international and imperial frontiers, finding a strong bond of inter-tribal unity in their common Mohammedan faith, the Poro society maintains and stimulates the industrial production and native exchange of every article needed by the African on the level of his indigenous culture in this part of Liberia.

France: Archæology.

Field.

TWO CIRCULAR ORNAMENTS FROM FRANCE. *by Henry Field, Chicago.*

4 The objects illustrated in fig. 1 were collected in the Loiret Department by Mr. E. Viot, Châtillon-Colligny, Loiret, France. The soap-stone disc (F.M. No. 214874) measures 15 cms. in diameter and 1.5 cms. in thickness. The other specimen (F.M. No. 217505), found at Colandon, measures 12.5 cms. in diameter and 1.5 cms. in thickness. These two circular ornaments are on exhibition in the Hall of Stone Age of the Old World in Field Museum of Natural History, Chicago. Stone discs of these types are rare in France. The classical example, in jadeite, was excavated from the tumulus of Mané-Rhoeck in Brittany. Discs of serpentine, jadeite, or mica schist have also been found at Corant (Auvergne) and other sites.

The delicate and skilled workmanship of these discs suggests a ritualistic use and modern parallels from various parts of the world tend to confirm this hypothesis. Capitan (XVI Int. Congr. Amer., pp. 103-106) calls attention to the similarity of ritualistic stone discs from Japan, which are also identical in form with circular ornaments on Mexican divinities. Furthermore, jade discs, worn by priests of certain Buddhist sects, play the rôle of fibulæ. Other examples occur in New Guinea, in the New Hebrides, and in the Gilbert Islands where shell discs are worn.

It would be of interest to know the distribution of these discs in western Europe.

Africa: West. **SOCIAL CHANGE IN A WEST AFRICAN VILLAGE COMMUNITY.**¹ *By Professor C. Daryll Forde.*

5 The situation in the large semi-Bantu village of Umor in S.E. Nigeria (MAN, 1936, 123) exemplifies the difficult problems that have arisen from the social and economic changes of recent years. There is in Umor a dual social structure. Exogamous patrilineal kin groups (*yepun*) which severally occupy delimited sections of the village site and tracts of agricultural land dominate the economic life of the community. Nevertheless the traditional village authority derives not from these patrilineal groups but from a co-existing non-territorial matrilineal organization. The authority of the priests and elders of the *yepun* is restricted in practice to

¹ The substance of a paper read before Section H, British Association, at Blackpool, September, 1936.

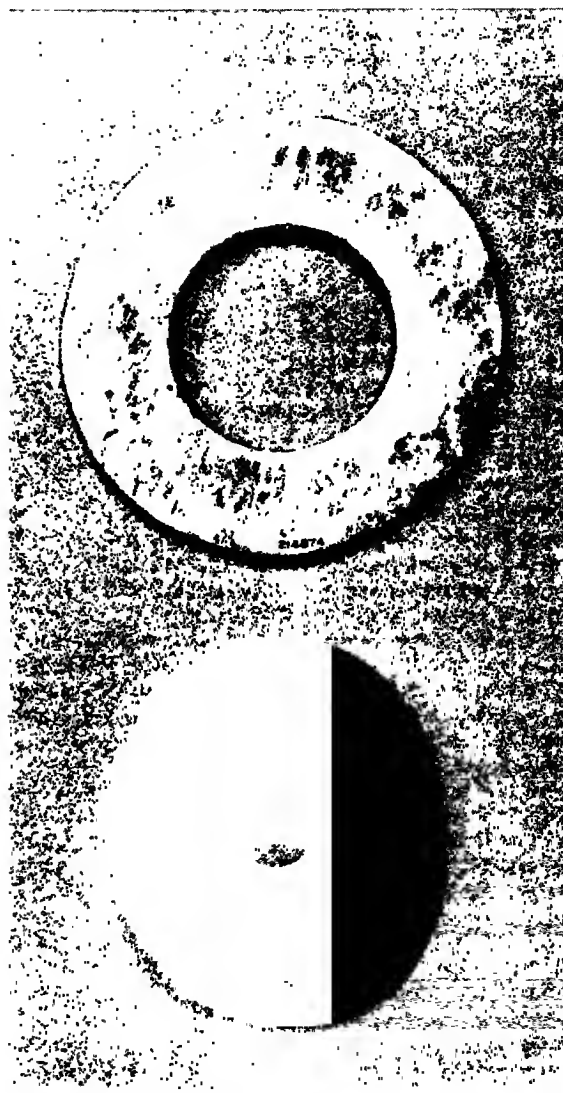


FIG. 1. CIRCULAR ORNAMENTS OF STONE: FRANCE, (Loiret).

Photograph by the Field Museum of Natural History.

disputes within their several *yepun*. The higher village authority lies with a corporation of priests of the matrilineal kin groups (*yajima*) together with the heads of clubs or secret societies which formerly provided a police and punitive force. This corporation of chiefs, collectively known as *Yabot*, derives its authority from the prestige of the *yajima* fetishes (*ase*) on which depend the fertility and prosperity of both man, animals and crops. The priest of the greatest fetish,

who is selected from one *lejima* which is regarded as senior to all others, ranks as and is called Village Chief (*Obot Lupon*) and has a special residence containing the fetish, situated in the centre of the village and outside all *yepun* land. The great power of the *ase*, and hence of their priests, for beneficence or disaster, have constituted the greatest single source of corporate stimulus and restraint in Umor society. The *Yabot* headed by *Obot Lupon* constitute the village council which formerly decided all great issues and assembled in the house of *Obot Lupon* as a court of law.

The arrival of British governmental authority at the beginning of this century, however, initiated a series of far-reaching changes. A native court for the area in which Umor lay was established on the Cross River at Ediba and Warrant Chiefs to act in this court were appointed from every village.

In Umor the existence of the Village Chief and of the *yepun* grouped in four wards was discovered but the *Yabot* were not recognized. Five Warrant Chiefs were created in Umor, one, selected on unknown principles, from each ward, together with the Village Chief. Although there appears to have been considerable friction between the chiefs of different villages and linguistic groups at the *Ediba* Court the warrant-chief system has worked fairly smoothly, particularly since a court was established in Umor itself in 1920. Despite the fact that, with the exception of the Village Chief, the Warrant Chiefs have never been *ase* priests, the office of Warrant Chief and the procedure of the Warrant Chiefs' Court has not only been accepted, but it is now firmly established in the social system. The Warrant Chiefs are now referred to as *Yabot Kekpatu* (Ward Chiefs)—a title which did not exist before—and the police and punitive activities of the secret societies on behalf of the *Yabot* seem to have withered without opposition. But the Government is now allowing the Warrant Chiefships to lapse in anticipation of the establishment of a Native Authority more consonant with the principles of indirect rule.

Meanwhile during this same period and especially in the last fifteen years an internal movement against the authority of the *Yabot* has developed. Its causes are disparate and its supporters relatively few but it poses a very considerable problem in connexion with the reorganization of the native authority according to the principles

of indirect rule which are designed to adapt for the purposes of local government the tribal institutions which the native people have evolved for themselves, so that the latter may develop in constitutional manner from their own past . . .²

Now in this particular case there is no serious difficulty in discovering and defining the traditional native authority. But some thirty years of an acceptable Warrant Chiefs' Court, which was divorced from the traditional native authority, have, together with other influences, to some extent outmoded that authority.

The other influences referred to may be briefly enumerated: (1) the development of small and relatively uninfluential Christian elements which are, nevertheless, a potent challenge to the prestige of the *ase* and their priests; (2) the development of trade in palm oil which has directed attention outwards beyond the social life of the village and given a considerable number of the younger men, who have been to Calabar and even to Port Harcourt, a knowledge of the outer world, and has also led some specialist traders to ignore village institutions and concern themselves only with the well-being of their own households; (3) the authority of the District Officer to whom individuals and small groups have begun to appeal, without reference to the *Yabot*, on matters of village concern. The *Yabot*, practically unaffected by mission, trading and administrative influences and concerned with a lengthy series of established rites, are baffled by social and economic change. They are by no means aggressive in their attitude and are somewhat in awe of the authority of District Officers.

The vocal modernist element on the other hand is decidedly aggressive whenever native institutions are under discussion. They have formed themselves into a club called *Bedom*, literally 'The Young Men,' and assemble formally when the *Yabot* hear a village dispute and have won the right to express their views formally through a spokesman at such meetings. The 'Young Men' desire that the *Yabot* should have no part in the Council and the Court which would constitute the Native Authority. They ask that the Village Council shall consist of *yepun* heads alone. For the Court they desire a virtual maintenance of the warrant chief system, *i.e.*, ward appointments, but

² Sir Donald Cameron: *The Principles of Native Administration*, para. 1, p. 1. Lagos, 1935.

subject to provision for replacement in response to popular appeal if members should prove inadequate.

If we attempt in the light of the existing trends to estimate the probable social condition of these people in, say, 20 years' time, when the *ase* rituals will be less respected, when there will be many more speakers of English and a more developed trade with wider external contacts, there can be little doubt that organization on some such lines as these offers a more flexible system for the future than the re-establishment of the exclusive authority of the *Yabot* and also one more likely to meet the future needs of the village. But to establish it now, out of hand, would cause a very deep division among the people. The Village Chief is a matrilineal kin priest and even the 'Young Men,' somewhat illogically, show no desire to interfere with the present manner of his selection. The matrilineal kin groups are still prominent in the lives of the people the majority of whom show a strong loyalty to the matrilineal kin elders and priests. The inheritance of certain property remains strictly matrilineal. The *Yabot* acting individually or in assembly still decide a

very considerable number of the disputes that arise and the Warrant Chiefs quite often on their own initiative send complainants in their court back to the *Yabot* for decision. The native court deals only with certain offences against property and person, some like murder are reserved to Government, while others are dealt with within the *Kepun* or by the *Yabot*. The authority of the *Yabot* is still therefore real and important and they can be appealed to at any time, while the court of Warrant Chiefs sits but once a month.

The social changes that have taken place in Umor in the period since the arrival of the British Government have therefore been sufficiently extensive to have created a very difficult problem in local government both for the people themselves and in the application of the principles of indirect rule. The most obvious immediate solution would appear to lie in the creation of a Council and a Court on which heads of both the matrilineal and the patrilineal organizations are represented. But that such a compromise will both avoid dissension in the present and provide for smooth development in the future is far from certain.

A DANCE OF THE IBEX HUNTERS IN THE W. H. Ingrams, O.B.E.

6 On my recent journey through the Hadhramaut, I witnessed in Dammūn, a



FIG. 1. IBEX HUNTERS' DANCE AT DAMMŪN.

suburb of Tarim, a dance in honour of a successful ibex hunt. Three heads had been brought back

HADHRAMAUT. IS IT A PAGAN SURVIVAL?



FIG. 2. STONE WITH IBEX HEAD AND INSCRIPTION, AT TARIM.

that morning and the whole village was *en fête*. The successful marksmen held their trophies above their heads (fig. 1). The long curved horns of one head were decorated with small bells, and the huntsmen headed a big procession of lines of men singing, shouting, and clapping. Others danced in circles and the procession rushed backwards and forwards through the village, followed by a crowd waving rifles and sticks. Crowds of women dressed in bright green cloaks watched the performance in the background. Every now and then a rifle was fired, but there were no drums. The participants were Arabs and slaves, but the performance was not approved by the Seiyids.

It seemed to me that the dance must be pagan in origin, both on account of the disapproval of the 'Ulema, and because the ibex was a sacred animal amongst the ancient South Arabians. The antelope was sacred to 'Athtar, their masculine Venus, and representations of the ibex appear on stones in South Arabian ruins. My second illustration (fig. 2) shows one of these stones bearing a Himyaritic inscription, preserved in a Tarim garden.¹

¹ For ibex-horns as charms on a tomb see also Freya Stark. *Geographical Magazine* IV (1936) pp. 111-13. —ED.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Myths and Dreams of the Baigas of Central India.

7 Summary of a communication by Mr. Verrier Elwin. 1 December, 1936.

The Baiga of the Central Provinces of India, now only thirty-seven thousand strong, live in the remotest forests of the Satpura Hills. They are only scantily Hinduised, almost untouched by missionary influence, far withdrawn from the march of commerce. Their myths and dreams indicate how strong and active are the primitive impulses of their old culture. Myth is still the motive-power and authorization of many tribal institutions: the driving of the nail which keeps the world in place, the offering of sacrifice, the cutting of *bewar* (shifting cultivation), the cure of disease, the war against witchcraft, are all traced to mythical events which established them as part of the social order.

The only institution which is not controlled by myth is exogamy, which is, in fact, rapidly breaking down. At the same time, incest is not regarded with the same horror as by other tribes.

The Baiga have an elaborate system of dream-interpretation. They attach considerable, but not excessive, importance to dreams which both express and reinforce their culture. A comparative absence of sexual inhibitions means fewer erotic dreams: the œdipus-complex does not represent their normal family-sentiment. Their most tormenting and readily-remembered dreams are the nightmares of anxiety and hunger.

The Baiga have sunk into great poverty; but many of their tales and dreams aim at dignifying the status of their tribe. They claim to have been born from the womb of Mother Earth before the foundation of the world and to be the Bhumia Raja, veritable lords of the earth.

The Culture of the Mexican Highlands. Summary of a communication presented by Miss Guda E. G. Duquès: 15 December, 1936.

One of the big problems, which arise studying the Indian civilizations of the New World, is: In how far are they autochthonous? What do they have

in common with other parts of the world or what have they adapted from them (Eurasia, Polynesia, Melanesia)? Remarkable is the use of stone implements at the time of the highest culture development and the lacking a.o. of the potter's wheel and the arch in architecture. Maize was the only corn which was indigenous. Typical American and specially Mexican was the calendar system. Of the different tribes on the Highlands of Mexico, the so called Mexicans did not belong to the autochthones, but they immigrated from the North. The elder group, the Toltecs, were the builders of the big pyramids at Teotihuacan, the younger group was formed by the Aztecs, who were the culture-bearing tribe at the arrival of the Spaniards. Both groups differ as to language and archaeological remains. In between these two groups the Mazapan culture has been found, whilst remains of another culture, showing no development whatever, have been discovered in the same regions. The latter is known under different names. Archaeological remains of these different phases are as follows:—

Big pyramids and the foundation of a house at Teotihuacan, pottery and sculptures of the Toltecs.

The model of a temple and the calendar stone, both closely connected with human sacrifice and religious conception from the time of the Aztecs.

REPORTS FROM LOCAL CORRESPONDENTS.

From Dr. W. R. Morse. Director of the College of Medicine and Dentistry, West China Union University, Chengtu, West China.

9 August 18th, 1936. I have just returned from an expedition into the Ch'wan Miao country in the south and south-east of the province of Szechwan. The expedition consisted of D. C. Graham, Ph.D., archaeologist and curator of the University Museum; R. G. Agnew, D.D.S., who studied the mouths, teeth and diet; and myself, professor of anatomy, who did physical anthropological measurements and observations and blood-grouping on this little known group. We were accompanied by five Chinese assistants, all either graduates of, or students in

our College of Medicine and Dentistry. Dr. Graham found many stone artifacts and other specimens and translated their folklore. Dr. Agnew also studied, and put to music some of their folksongs.

We are all teachers in the University. This was the tenth trip into the aboriginal tribes' country on the Szechwan-Tchewan-Kweichow-Yunnan borderland taken by Graham and Morse and the fourth by Agnew. We are all members of the West China Border Research Society. One member (Morse) has made 3,046 anthropological measurements, etc., on Chinese, Tibetans, Noso (Lolo), Chiang, Gia Rong, Shi (Hsi) Fau, Bo Lo Tsi, Miao (Ta Heva), Miao (Ch'wan) and Chung Chia. No analysis has yet been made of this material.

Professor Bernhard Eduard Petri : *work in Siberia :* translated from a letter to Prof. Minns and E. J. Lindgren.

28 July, 1936. During the present archaeological season I had to go out for field work at the very beginning of spring, when the Siberian flora, after the lingering winter, is not yet covering the surface of the earth. And in fact I was fortunate enough to find a new paleolithic site which is as much older than the Verkholsenskaya Gora (=Mountain) as it is younger than 'Mal'ta'. Preliminary excavations yielded fifteen excellent tools, not counting various small items. I was torn away by the illness of my wife, and the excavations were interrupted. Now . . . I am equipping my motor-boat, in which I make my journeys, and very shortly I shall proceed to the excavations on (Lake) Baikal, on the Angara (R.) and the Kudu, where is my recently opened paleolith (site).

At present I have here a reunion of my pupils. M. M. Gerasimov has arrived from Leningrad: he is the one who carried out the excavation of the neolithic graves on the Selenga R. and he has now left for the excavation of the paleolithic sites on the Bely (White) River. From Leningrad arrived another student of mine, A. P. Okladnikov, who leaves in a few days for the excavation of the neolithic cemeteries down the Angara River. This is my very best and most talented pupil. In addition there has come from Leningrad Prof. Kazakevich, who is interested in the Iron Age and is studying my excavations at Tunka (? Tunke); graves from the Chingis-Khan epoch. Thus a local archaeological congress in miniature is taking place in my home, and every day there are archaeological controversies.

O. H. Bedford : *journey in Chêng-tu.*

After two-and-a-half years' study of Chinese archaeology at the Courtauld Institute, London, I decided on a two-years' sojourn in China, to see the country at close quarters and to gain a more complete knowledge of the arts and customs of the people.

After landing in Shanghai early in June I was tempted to visit first of all the province of Ssü-chuan, not only because the mountainous regions to the west of the Chêng-tu plain promised to be cooler than other parts of China, but also because

this province offers a rich field for archaeological research. Many happy days were indeed spent on the sacred buddhist mountain Tai-shan and among its many beautiful temples. Then on my return to Chêng-tu I had the good fortune to accompany Dr. D. C. Graham, curator of the West China University Museum, and Prof. Chêng Te K'un, a noted archaeologist, to the newly discovered Sung dynasty kiln-site beyond Chiung-chou. There I had the opportunity of collecting numerous sherds of glazed pottery which will in time contribute to the study and recognition of glazes produced in Ssü-chuan centuries ago.

Surprising is the number of so-called 'Dragon's Teeth' which from time to time make their appearance in this province. In a temple on Mount Omei I had a chance of studying the large 'Buddha Tooth' that is venerated in the Temple of a Myriad Ages, 14½ inches long and weighing no less than 16½ lbs. This and the 'Dragon's Teeth' are without doubt those of some large mammoths which once inhabited this plain. Another tooth which I saw in the hands of a dealer, and was able to photograph, appeared to be an incisor, its maximum length being 5½ and its width 3½ inches. Many other such fossil teeth may be seen in the Museum of the College of Medicine and Dentistry of the Union University, Chêngtu.

My next step will be to survey the Han burial-cases which are found in great numbers between the cities of Chia-ting and Su-fu in the southern part of the province, a task hitherto only superficially attempted.

Too much praise cannot be given to the magnificent work of Dr. D. Graham in collecting and preserving in the University Museum the many burial objects from these and other tombs; nor should that great pioneer, T. Torrance, remain unmentioned.

After concluding my studies in the Museum and in the Han caves I shall journey to Shantung to visit Chu-fu and the site of the ancient city of Lu, the sacred mount Tai-shan, Tsi-an with its famous library and museum, and the excavations on the site of the ancient state of T'an, on my way to Pei-p'ing. From there, after spending some months at the College of Chinese Studies, and visiting the sites of archaeological and historical interest, too numerous to mention, my travels will continue through the province of Shensi; first to Nan-kou, then to Wanchuan, Ta-tung, Hun-yüan and Wu Tai Shan, the Northern Sacred Mountain; then on to Tai-yüan and the Buddhist caves; thence to An-yang to visit the famous excavations on the site of the famous capital of the Shang-Tin dynasty where the oracle bones and many exquisite jades and bronzes dating from the twelfth century B.C. have been recovered. Then on to K'ai-fêng, Lo-yang, Lung-mên, and finally to Ch'ang-an, the capital of many Chinese dynasties.

Here I find opportunity to express my gratitude to all the British residents in Chêng-tu and in other cities of Ssü-chuan for their ungrudging and generous hospitality and for their valuable help, both here and on Mount Omei.

REVIEWS.

AFRICA.

The Social System of the Zulus. By E. J. Krige. London, Longman, Green & Co., 1936. 8vo. 240 pp. Price 25s.

10 The Wisdom of the Tonga-Shangaan People. By Junod and Jaques. Pretoria, Henry Philippe and Alexandre Jaques, 1936. 8vo. 285 pp.

Mrs. Krige sets out in her Preface to disarm criticism by her frank disclosure of the method by which this compilation has been carried out: for she is herself in no way intimate personally with the Zulu people. The effect of this Preface is to raise a number of doubts on a number of important questions: questions mainly concerned with the practicability of doing such work in such a way. These doubts can be confirmed or dispelled only after this bulky material has been fully and fairly examined. Here there is no place for rapid or cursory treatment by a reviewer. The authoress claims that her aim is the "scientific co-ordination of the information scattered about in numerous publications," and that is a high claim.

Let it be said at once, however, that doubts have largely been dispelled by the time the book is laid down. We customarily talk of this or that book being 'a mine of information.' I would rather use here the phrase 'a museum,' where one does not, as in a mine, require to go tool in hand if one is to hack out and extract what one wants. But one feels a need of reassurance upon one point before accepting the analogy of the museum where one expects to enter and find the material chronologically displayed with the best available skill and accuracy. One would like to feel sure that in assembling under one roof, as it were, this splendid body of Zulu material, the right relative values have been maintained between source-material from early, middle and late South African writers. At certain points it would seem as if material is being given a value above its due.

This is noticeable in certain linguistic footnotes, for example, where—as on p. 23—we have a suggestion from van Warmelo as to the derivation of the various terms for *my, your, their father*, "from the root—*gisa* 'father'." And again—on p. 26—where we get in connection with an attempt to explain *mabame*, mother's brother, this, from Dohue, "... literally 'the property's male' (from the obsolete verb *mala*, 'to be of value,' and *ume* denoting 'human being')." Here lack of personal intimacy with the language has led in the first case to the acceptance of information crudely incomplete, and, in the second case, has incorporated material that can hardly stand scrutiny at all.

But having said that, and recognizing that in the linguistic field lies the most treacherous ground for anyone essaying such a task one has to congratulate Mrs. Krige on the result of what must have been a very heavy piece of work. The bibliography—which is helpfully put in as part of the introductory matter and not at the end—is evidence of the very wide interest which the Zulu people have attracted to themselves since, say, Gardiner's *Journey to the Zoolu Country* of 1836 set the ball rolling. Indeed, this present volume might very well be considered as something of a centenary commemoration. And with all her 420 pages, Mrs. Krige succeeds in being pleasantly readable; she succeeds also in presenting a gigantic mass of information in a form which makes consultation easy, no matter which particular phase of Zulu life is under study.

This arrangement of the material has been done with

a right sense of proportion. Thus we have the five most fully-treated sections (chaps. V, VI, IX, XI, XIV) given to *Transition from Childhood to Adulthood*; *Marriage Ceremonies*; *Economic Life*; *The King and his Functions*; *Medicine and Magic*, while around these central themes are sections of lesser fullness. These include *The Kinship System*; *Birth and Childhood*; *Death and Burial*; *Succession and Inheritance*; *Political Organization*; *Military Organization*; *Religion*; *Music*; *Dancing and Song*; *Folklore*. These are not all as full as they might have been. But Mrs. Krige makes up for a rather slight treatment in certain of these sections or at any rate gives as compensation—a number of appendices of quite unusual interest. These cover Relationship Terms; Dress and Ornamentation; Food and Food Taboos (especially interesting here are the *amasi* abstentions); Interchange between the contracting parties at Marriage; and Handicrafts. Many readers will be particularly grateful for these appendices.

There are two maps—tribal movements and distribution—accompanying a brief historical section. And illustrations of excellent quality have been used with wise moderation and good effect. Altogether a very serviceable volume.

Turning to *The Wisdom of the Tonga-Shangaan People* we come into the very sound and movement of African life and thought itself. This little book is dedicated to the late Henri Junod by his son, in collaboration with a colleague, and has been produced under the auspices of the Research Grants Board of the Carnegie Corporation. It is entirely composed of Proverbs, Riddles and Proverbial Names and the material is drawn from Tonga, Twa and Ronga, with an occasional Chopi addition. There are 892 proverbs, over 200 riddles and a very full collection of 'proverbial names,' by which one understands names having special significance and import. This last section Mr. Jaques hopes shortly to extend in a separate publication which will include 'praise-poems' and a dissertation upon all that is involved in the giving of a name in an African community.

To civilized people who still are far from realizing the high level upon which "savage" African thought habitually moves, such a collection must give pause. But it is as memorial to one who loved these people and whose great work is indeed a memorial to them that this little book must be received. They themselves will value it as the years pass since the wisdom of their fathers is in it, not merely in English for the stranger but with their own tongue and that of the stranger interpaged. It is also, one imagines, the fullest thing of its particular kind yet produced for South or for East Africa.

CULLEN YOUNG.

Reaction to Conquest. By Monica Hunter. With an introduction by General the Rt. Hon. J. C. Smuts. Published for the International Institute of Languages and Culture by the Oxford University Press, 1936. 8vo. xx + 582 pp., illustrations 3, plates 28. 30s.

By a mischance the word 'conquest' has been selected for the main title of this very notable book. Probably Miss Hunter felt that it might be better to keep 'contact'—that very hard-used word—for her sub-title; and many people will sympathize with her in this. But the background of conquest, in its ordinary sense, is so remote to-day from the Pondo people and the environment of contact so all-pervading that it would have

been wiser to take the risk and just give the book the title that fits it like a glove: *Reaction to Contact; the Effects upon the Pondo People of European Culture in South Africa*.

General Smuts says in his preface that Miss Hunter's book is worthy to stand beside Junod's *Life of a South African Tribe*, and adds, "that is high praise indeed." As I lay the book down and consider all the ground covered among these Pondo people in Miss Hunter's company, I am almost inclined to say that the praise is, perhaps, just not quite high enough. It is enough for the disciple that he, or she, be as the master, and in the path where Junod led we are all just followers, but those who follow carry the work on to points not previously reached and a book like this is a signal example of this advancing achievement.

I have spoken of moving among these Pondo people in Miss Hunter's company, but actually it has been a larger party than that. This book is what it is, not merely in value but in size, because throughout it the reader is always in contact with the actual men and women with whom the authoress worked, and is constantly hearing them speak directly in their own authentic phraseology regarding this side of their intimate life, or that. The fact that this record of two visits to Pondo-land runs to very nearly 600 pages is due to the constant use of the direct African voice, in explanation and in criticism; in question as well as in answer; in description, in comment and in authentic colloquial illustration. To one reader, at any rate, it is this quality in the book that has made a pure delight out of what at first sight looked like being very hard labour.

The work has fallen naturally into three divisions, since there is Pondo reaction to contact within the native reserve, within the urban communities, and on European farms respectively. Of these three, Miss Hunter devotes to the first, four-fifths of her space and gives the other two an equal share of the remaining fifth. But this division does not mean any scamping of the work in the two sections where contacts, social and economic, are closer. It means that the opening up of the life of the Pondo as to-day found within the Pondo-land reserve is done so fully in the first section that the background is prepared, the foundation laid, upon which the reader and student can follow the men and women of the tribe as they go out of the life of the reserve into the quite different conditions of town or European farm. The last criticism, if there is any criticism, of this book, would be of 'scamping'! It must be one of the most thorough, most painstaking and most complete surveys of an African people in existence; and is likely to remain outstanding in these respects for a very long time.

Once Miss Hunter leaves the reserve and goes out with her Pondo into the life of the town and on to the European farm, she takes for granted that her reader has got a sufficiently vivid picture of the kind of person this Pondo man or woman is, and confines her study of urbanization and squatterdom to three points: What becomes the Economic Condition of the man or woman? How is the Social Organization affected? What happens within the area of Religious and Magical Belief? Her work upon these three questions will, I think, place under an equal debt of gratitude the industrialist, the administrator, the missionary and the private employer. In company with her and her African informants one not only sees but feels the life into which these people are being massed and herded; and is amazed at the courage and the patience and the comradeship.

There is, further, a concluding section entitled 'Tendencies' which is exceedingly useful. Its information regarding the 'movements' among this people

in a situation so like in many ways the situation of other exiles beside strange rivers in a foreign land, is a necessary closing point in a book like this; though, of course, the matters dealt with among the 'tendencies' refer to a native South African rather than to a peculiarly Pondo situation.

For a book of such scope this can only be a review by way of introduction and high commendation. One thing only I would like to mention by way of minor criticism, and it is a matter that will seem of the very smallest moment, perhaps, to most. But I have been struck at a number of points by a question concerning translation of conventional vernacular usages. I may illustrate, perhaps, by reference to instances of the Bantu plural—see pp. 34, 35 and 50, *ulade wethu*, *dadevethu*—where the bare translation, 'my sister' is quite sufficient for those who recognize at once in the plural pronoun the action of the classificatory principle in Bantu relationships, but might have been extended into 'our, i.e. my, sister' for the benefit of those whose attention needs to be specially drawn to this point. On p. 122 also, there is a mis-translation of the pronoun in the phrase *Nautsi inkomo yethu* (Here is your beast) as used at a ritual killing, where—if *yethu* had been properly understood as 'our' and not 'your'—Miss Hunter's question as to ancestral rights over the cattle might not have been necessary. Judging, however, by the analogous phrases elsewhere in Bantu offerings to the ancestors, the Pondo phrase may well be *Nautsi inkomo yenu*.

For clarity, also, it would probably have been better, on p. 126, if in Cases 6 and 7, where the marriage transactions of these two Houses are detailed, the full phraseology as used in connexion with the other Houses had been used, even at the expense of brevity. "B₁ was given a₁," of course means that the *ukulobola* material of the daughter a₁ was apportioned to the son B₁; just as in Case 7, "b₂ went to B₁," has the same meaning. But it would have been better to use the full form, "The *ikhazi* of a₁ went to B₁," and so on.

For a work of this size and fullness the indexing seems to have been remarkably well done, and the Glossary provided is most useful. The Pondo area is shown on a map of 'The Cape Native Territories' which appears on the inside covers both at front and back. And it should also be said that the many photographs are good in themselves and admirably illustrate the text. This is a very fine piece of work.

CULLEN YOUNG.

Native Policies in Africa. By L. P. Mair, M.A., Ph.D. London, George Routledge & Sons, 303 pp., 6 maps. Price 12s. 6d.

12

It is now some eight years since R. L. Buell published his two volumes on 'The Native Problem in Africa.' It is therefore some nine or ten years since he travelled rapidly through Africa collecting the material for them. During that period significant, sometimes far-reaching, changes have taken place in nearly all African territories, some as results of world conditions, some as results of deliberate colonial policies. A fresh review of the situation was therefore urgently needed, not only in the interests of knowledge for its own sake, but because Africa has once again become a pawn in the game of European politics. Those engaged in the game, on whatever side they play, are often ignorant of the real nature of the pieces they shove across the board. This applies equally to those who think in terms of imperial expansion and prestige, and to the well-wishers of Africa who hope to plan a future in which native interests are paramount. To them Dr. Mair's description of "what the various governments in Africa are making of the African," appears, very

opportune, as an indispensable guide book, since, for the present, it holds the field alone.

The author would be the first to admit that a volume of this kind, based largely on a study of documentary material, and only to a limited extent on local first hand knowledge, is necessarily incomplete and may sometimes be inaccurate in detail. The whole truth, in so far as it can be found, depends upon a combined study of the human material and the printed records over a very wide field, a task almost impossible for a single individual. This book is no substitute for detailed local studies of administration or of small units of African society. Those with particular knowledge of special areas may no doubt find statements of fact which they may question or omissions which they may regret. This does not, however, detract from the intrinsic value of Dr. Mair's achievement, which is to present within a small compass an anthropologist's view of contemporary native administration drawn from a comparative standpoint. In a sense, it is true, the book is a pamphlet on a grand scale, since the author is to some extent arguing a case. That case is a defence of Indirect Rule. This attitude of mind, however, arises inevitably from the writer's approach. To any one regarding human society as a living organism, it is natural that a system of government based on the evolution and modernization of existing social agencies should make a greater appeal than systems envisaging the permanent subordination of the native African, or his development as an industrial unit wholly divorced from his tribal background.

Although the degree of detail in Dr. Mair's book necessarily varies with the quality and amount of documentary material available, the sections relating to non-British territories, even when they are only outlines, will have a special interest for many English readers. The remarkable amount of information here collected in one place is not, so far as I am aware, obtainable in a convenient form anywhere else.

While Dr. Mair's sketch map of native administration is offered primarily to the intelligent general reader who wishes to form an opinion on the African problem, it provides at the same time a useful outline for specialist readers intimately familiar with some corner of the continent. In so vast and diversified an area, investigators in one district or in one subject may often be tempted to lose sight of the whole through their preoccupation with the part, or to generalize from the known to the unknown. Dr. Mair's book attempts part of the task of synthesis for which a demand is now making itself heard, and which lays an urgent responsibility upon this generation.

HILDA MATHESON.

The Musical Instruments of the Native Races of South Africa. By P. R. Kirby, Oxford University Press, 1934. 285 pp., map, plates. Price 35s.

African music, touching as it does every aspect of native life, has been on the whole less fortunately treated by the ethnologist than it deserves. Early travellers for the most part found it monotonous, limited or incomprehensible, and later investigators, though equipped with the phonograph, were few of them qualified to analyze or systematize the music and instruments they collected. It has been left to the musician turned ethnologist to fill the gap with scientific fieldwork of his own.

In this important book, published with the assistance of the Carnegie Corporation of New York, Professor Kirby sets out to record particulars of the hundred various native instruments of South Africa, an area in which, as he points out, much of the original culture is preserved. He shows how each instrument is con-

structed and played, supplying 'specific and detailed' information, and corroborating earlier accounts with references in native legend and custom, and with his own first-hand observations among the natives themselves. He deals in this manner with rattles, drums and xylophones; horns, whistles and reed-flutes; and with various stringed instruments; considering, finally, instruments which have been imitated from European examples, which form a category of their own.

Few primitive instruments can be regarded as truly indigenous; indeed, most have been adopted from a more advanced civilization, and modified in the process. But the formulae for making the instruments, an interesting compact of inherited wisdom and tribal superstition, have mainly survived as craftsman's lore. The native fashions his whistle from the leg-bone of a sheep, his drum from a tree-trunk and a stretched skin, but in no haphazard manner. The native instrument is by no means as simple as it looks, and the careful selection of a particular wood or a certain length of reed shows that from centuries of trial-and-error the craftsman has derived a considerable grasp of the principles of sound-production. The bustard's quill of the *gora* is deftly seamed to the stave by a twist of hide which also acts as a 'bridge'; the resonators of the *mbila* are attached to the frame by an ingenious arrangement of wax, small fruits and vibrators made from the diaphragm of a jerboa. The ingenious native of the mines even makes a virtue of the petrol-tin, using it as a substitute for the calabash resonator of his *mbila*.

This traditional inventiveness is often overlaid with ritual and sympathetic magic. Venda reeds may only be cut from the sacred groves, and by specialist makers, though for a good economic reason. The Tshopi *mbila* is smeared with the burnt ashes of a lion's larynx, and the heads of a strong- and sweet-voiced bird, which in effect seal air-leaks and stop the instrument from rattling. Many instruments may never be played by women, others are abandoned at adolescence. The wind instruments in particular are associated with ritual ceremony, with rain-making and fertility rites. Professor Kirby deals at length with the reed-flute ensembles, which were thought to be peculiar to the coast Hottentots, but are now found among the tribes of the interior and even as far north as the Congo, but not in the coast areas at all.

Further, the stringed instruments produce on examination more than meets the ear of the casual listener. Professor Kirby shows that most of these instruments are made to play both fundamental tones and harmonics, and that these niceties are fully appreciated by performers whose music has reached the polyphonic stage of the medieval 'organum.' This is well illustrated by the reed-flute ensembles in which as many as nineteen flutes blend in the fourths and fifths of our own early music.

The book is enriched with many excellent plates showing the instruments being constructed and played, and there is also a useful index. One hopes that this is only the first of a series of similarly intensive studies.

D. H. VARLEY

African Native Music. An annotated bibliography. Compiled by Douglas H. Varley. London: Royal Empire Society, 1936. Price 5s.

The arrangement of the entries in this bibliography is in the main geographical, the political divisions of Africa being chosen as headings for the various sections. In addition there are sections on Drum Language, Museums containing instruments, Bibliographies, etc. The entries in each division are placed in chronological order, and there is a brief index of authors.

The author has performed a useful service in compiling and annotating the various scattered references on this subject in English, American, and foreign books and periodicals, and ethnologists will note with interest the large number of ethnological works which have been cited.

Omissions were bound to occur; but the section on musical instruments in the fifth edition of *Notes and Queries on Anthropology* (1929) should certainly not have been omitted. This section was entirely revised and considerably augmented by Professor Henry Balfour, and a system of classification for musical instruments was advanced which has been widely used.

I noticed a few mistakes in the text. Dempwolff's *Die Sandawa*, p. 65, should read *Die Sandawe*; Montecuccolo, p. 69, should read Cavazzi da Montecuccolo, this author being better known under his first name. There are English editions of Dapper, p. 19, and Casati, p. 30, which might have been mentioned with advantage.

The successful completion of a work of reference of this character is really a matter for congratulation rather than criticism, since the difficulties of compilation are manifest, and there is no doubt that this bibliography will be very useful to all interested in African Native Music. L. J. P. G.

Land und Völker von Angola: Studien, Erinnerungen, Fotos der II. Schweizerischen wissenschaftlichen Mission in Angola. By Th. Delachaux and Ch. E. Thiébaud. Neuenburg (V. Attinger), 1936. 143 pp., map, 80 plates, 23 text illustrations.

This volume is an entertaining account of the travels and adventures of three Swiss naturalists in that interesting and little-known region, the hinterland of Angola, south-east of Lobito Bay. In a somewhat popular style, the narrative describes the results of the second Swiss Scientific Mission to Angola, the account of the first expedition having been published by Dr. Monard, *Bulletin de la Société Neuchâteloise de Géographie*, 31, 1930.

There is some valuable ethnographic material in the book. This is especially the case with regard to the illustrations, which are excellent and numerous. Very little is known of the tribes inhabiting the South of Angola, and any fresh information is to be welcomed. The map is helpful in showing the distribution of these tribes, of which the chief are the Tyivokwe (Tschivokwe), the Handa, the Humbe, the Ngangela, the Kwamatui, the Nyemba and the Kwanyama.

The Tyivokwe are the gypsies of Angola, preserving their ancient customs intact. They came originally from the Belgian Congo. Of outstanding interest are the Kwanyama people of the extreme South. They are a cattle-breeding folk, and their complex homesteads are of labyrinthine ingenuity. In the heart of the maze is an apartment in which is an altar on which repose the sacred ox-skulls dedicated to the ancestral spirits. The chief fire also is found in this room. In another apartment, serving as a reception room, are the fireplace and sacred wood used for the ceremony of the first grain.

Most of the Angola tribes have elaborate initiation ceremonies which would repay careful study. Masks play an important part in these rites. A short chapter on a 'Bushman' settlement is well worth reading by students of that primitive people.

The Expedition made a collection of three thousand five hundred ethnographical specimens in addition to the zoological ones. The illustrations of the magic dolls (*Puppen*) make one wish to have learnt something of the beliefs and customs relating to these dolls, such

as prevail among Basuto and Chopi. As M. Thiébaud remarks: "Buying ethnographical and zoological material is a very complicated matter." Happy are those whose methods are unimpeachable!

The reference on p. 130 to *Photo 56* applies really to *Photo 58*. E. D. E.

Coutumes Algériennes. By René Maunier. Paris: Editions Domat-Montchrestien, 1935. 202 pp.

16 Readers of MAN who attended the Anthropological Congress of 1934 will be respectfully familiar with Professor Maunier of the Académie des Sciences Coloniales of Paris. The longest of this collection of papers—the detailed examination and comparison of *taoussa* and other forms of ceremonial exchange, forming the origin of contract in French North Africa—was a communication to that Congress. Professor Maunier has lived long in Algeria (its Government has subscribed to the publication of this work), and his writings on that country chiefly aim at explaining native custom in relation to French legislation, the interplay and effects upon each other of Kabyle custom and European law. It is possible the Professor sees French colonial law in rather a rosy light, when he declares in his introduction that by organizing "un statut commun territorial" a nation has been formed—"l'idée de 'l'Algérien' est l'œuvre des Français"; and when he describes in his conclusion the blessings of civilization that France has brought by her rulers and judges to North Africa. However, he very ably defines the concept of a nation by an analysis of the attributes of that concept, and shows how in spite of being a succession of so-called Empires, Algeria did not possess these attributes and was not in fact a nation in the true meaning of the word before the French advent.

In his careful study of the custom of *taoussa*, defined on page 93 as "un échange rituel, usuraire et casuel, caché ou masqué sous un don fictif," Professor Maunier illustrates the first appearance of contract, when the breaking up of community or tribal life has weakened those primitive obligations which he calls "coopération par intérêt." He gives an extremely detailed account of the ceremony, which is not unlike a modern bottle-party, examining its actors, words, gestures, times and effects, with the same kind of elaborate thoroughness that we find in such a work as *Aryonuts of the Western Pacific*; for apart from the legal and economic aspects, he lays stress on the moral, religious and mystical function of the *taoussa*. "Les présents associent et purifient en même temps"; and he quotes the African St. Augustine: "L'amitié est communauté; point d'affection sans donation." The distribution of wealth by *taoussa* is also a form of piety, averting the jealousy of the gods, and is thus a kind of "symbolic destruction" (p. 132); of which other forms are instanced by the story of ordeal by destruction in the rivalry between two Egyptian gypsies; or the ritual breakages recorded by Westernmark. The *taoussa* also illustrates the idea of alliance by exchange, as we find in the Moroccan custom of ending a feud by the exchange of turbans. Perhaps the English exchange of hats on charabanc parties is another instance of this symbol of unity? Professor Maunier admits the *taoussa* has evil effects, for it often results in bitter rivalries; but on the whole it fulfils its function: "devoir, plaisir, rituel, honneur." And he shows that if exchange is a rite, a rite is also exchange: Benjamin Constant had already spoken of religion as traffic and seen oblation as payment. Thus a native of Maghreb specifically states his sacrifice on the birth of a child is payment for a blessing.

Professor Maunier covers a wide field in his comparisons

of the Kabyle *taoussa* with other forms of exchange in North African tribes, and it is striking how in spite of formal variation, the underlying meaning of the fictitious gift is revealed. The book contains a certain

amount of repetition, and there is too much underlining of crucial words and phrases; but a very good case is made of the thesis: "c'est dans le culte ainsi que se forment les droits." A. B. V. DREW.

ASIA

Men and Gods in Mongolia. By Henning Haslund.

17 London: Kegan Paul, Trench Trubner, 1935. 8vo. xvi + 358 pp., illustrations and map. Price 15s.

During the remarkable journeys described in this book the author engaged in studies which are always of general, and sometimes of specific, interest to anthropologists. The preceding years in Outer Mongolia, of which he has already told in 'Tents in Mongolia,' had equipped him with a spoken knowledge of Mongol and a familiarity with deserts, steppes and forests which served him well when, in 1927, he became a member of Sven Hedin's Central Asiatic Expedition and new fields opened out before him. Although he had received no academic training in ethnography and was often kept busy leading a caravan or assisting the various scientists in their tasks, he missed no opportunity for learning more about the Mongols. He gives an account of incidents in the daily life of herdsmen, hunters and lamas in widely scattered tribes, including those of western Inner Mongolia, the Torguts of Etsin Gol, the Däde Mongols of north-western Tibet and the Khoshuts and Torguts of Khara Shar, among whom he spent several months. Recently published books by Professor Lessing and Dr. Montell, who joined the expedition later, treat the first two of these groups, but Mr. Haslund's material on the others is probably unique. One must hope that he will yet give us an even fuller version of this part of his investigations and particularly of the historical documents which he discovered in the Shara Sume library.

Mr. Haslund collected sixty examples of Mongol folk-music under ideal conditions. The Torgut ruler sent out couriers to search for gifted singers, who gladly competed for the honour of having their songs recorded on the mysterious wax discs, while the Khan's secretaries wrote down the words. A considerable number of anthropometric data were also obtained both by Dr. Hummel, for whom the author conducted the negotiations which made them possible, and by Mr. Haslund himself; the ingenious ways in which the stubborn Mongol prejudice against such physical indignities was overcome arouse admiration.

With regard to the author's many descriptions of Mongol customs and characteristics the question arises, as always in connection with a 'travel book,' of how much reliance the anthropologist is entitled to place on the accuracy of details. The rigours of travel, alternating with life in crowded tents, which constituted the author's régime, do not suggest that he had much leisure for making notes on the spot. Nevertheless, the reviewer has been able to confirm a number of Mr. Haslund's statements from other sources and is impressed by his powers of astute and careful observation. There are only a few minor criticisms to make.

The provenance of most of the excellent plates is given, but it should have been indicated that those facing pp. 225 and 312, as well as the one opposite p. 281, are from Pallas, and it is a pity that this great authority on the Kalmucks does not appear in the bibliography. The rough phonetic transcription used for Mongol words, although usually satisfactory, digresses unwarrantably from the written form in some cases, e.g., 'Oborgon,' 'taburn' instead of 'ebugen,' 'tabun,' and is quite inconsistent in others, for instance 'Khara Gobi,' 'khara yasse,' but 'harhung' instead of 'khara khun.' In 'Tents in Mongolia' (p. 145) Mr.

Haslund correctly describes 'arselan' (there 'Arse-lang'), the Mongolian version of his name, as meaning 'lion'; but in the present work (p. 313) he translates it as 'tiger,' for which there is a different term in Mongol ('irbish'). Since the lama astrologer who binds the author and Seng Chen Gegen, a reincarnation of the Tibetan Tiger divinity, in symbolic brotherhood makes much of the fact that both their names mean 'tiger,' it is important that the reason for this special interpretation of the word should be explained.

E. J. LINDGREN.

A Handbook of the Rawang Dialect of the Nung Language. By J. T. O. Barnard, C.I.E.,

18 C.B.E., F.R.G.S. (Supdt. of Government Printing and Stationery, Rangoon. Rs. 4=6s.)

Philologists are indebted to Mr. Barnard for a sound grammar of the chief dialect of the Nungs inhabiting the 'Nmai valley to the North of Myitkyina. The language belongs to the Burman family and is akin to Burmese and Chinghpaw. The grammar is clear and is followed by 19 colloquial exercises, cunningly designed to make the student think hard. Indeed it would have been merciful to give a few more literal translations. Then follows a vocabulary. It is impossible that it could be full, but there are a good many obvious omissions. Surely, for instance, there are separate words for virgin and secondary jungle, and how are rice in the ear, unhusked, husked, and cooked distinguished? There is an appendix on Nung customs, to which is to be added a good deal of material embedded in the colloquial exercises. A few printer's errors have crept in. J. P. MILLS.

Chinese Art. Edited by Leigh Ashton. Introduction,

19 Laurence Binyon. Painting and Calligraphy, Laurence Binyon; Sculpture and Lacquer, Leigh Ashton; The Potter's Art, R. L. Hobson; Bronzes, A. J. Koop; Jades, Una Pope-Hennessy. Textiles, Leigh Ashton. London, 1935. xvi + 111 pp., plates 23. Paper, 2s. 6d. net, cloth, 3s. 6d. net.

Composed in anticipation of the Exhibition of Chinese Art now at Burlington House, this little book constitutes the best short introduction to the study of the art of China that has yet been written in the English language. The essays of which it consists are marvels of condensation and pleasant to read, and will be of the greatest assistance to visitors to the Exhibition. In the next edition a reference on page 91 to Plate XXI should be corrected to Plate XX, and minor modifications in the chronological table at the beginning of the book may be considered advisable. C. G. S.

The Chinese Medical Journal. (Vol. 48, No. 12).

20 December, 1934. Davidson Black Memorial Anatomy and Anthropology Number.

It was a happy thought of Davidson Black's associates and friends in the P.U.M.C. to dedicate a number of their journal to the memory of their distinguished colleague. The number is illustrative of Black's many interests. It begins with a portrait, a short summary of Black's work by Dr. Fortuyn, a bibliography and an extract from Black's Croonian lecture. These are followed by a series of original articles, which include some observations on living Chinese, several specialized anatomical papers on particular features of Chinese racial anatomy—the upper eyelid, the cutaneous nerves

of the foot, and the coronary arteries of the heart, all of which are particularly important in view of the small knowledge we have at present of the comparative anatomy of the soft parts in the human species, while Black's interest in comparative anatomy is illustrated by a paper on the maturation of erythrocytes in the albino rat. The number also includes a plea by Paul Stevenson for the continuation of co-operative embryological research in China and a very important paper by the same author on the interrelation of biometric and clinical methods in the appraisal of nutritional status.

L. H. D. B.

Keris and other Malay Weapons. By G. B. Gardner. Edited by B. Lim-ten Milne. Singapore, Progressive Publishing Company, 1936. 138 pp., pls. 91.

Besides the typically Malay *kéris* this work deals with other daggers, swords, spears, cannons, small arms, bows and arrows, blowpipes and several miscellaneous weapons, old and new, such as clubs, etc. Their origin, whether native or foreign, and the methods of their manufacture are in certain cases discussed, and their use is indicated. In short the book contains a great deal of valuable and interesting information on the subject and represents a long period of research and collection of specimens. In the author's preface acknowledgments are also made to the assistance of friends in regard to these matters. The section on the *kéris* (which has numerous varieties) takes up about half of the volume, which also includes appendices on Malay weapons, war dress and armour, fortifications and ways of acquiring invulnerability, as well as a Malay-English glossary and a rather brief bibliography. In various places sidelights are thrown on the native beliefs and customs, connected with some of the weapons described, which will be of interest to ethnologists and students of folklore.

I have noticed a number of trifling misprints in English and Malay words that are not worth setting out here, as they would be obvious to anyone who knew the languages. *Pajajaran* (p. 14) should be (in English spelling) *Pajajaran*, a former kingdom in Western Java. *Sma* (p. 57) is a faulty spelling for *Sēmar* (the clown in the old Javanese drama) and cannot be etymologically connected with the Malay word *sēmanjat*, a kind of 'life force'. The words *lanqun* and *baju* (p. 114) are represented on pl. 87 by *lanqi* and *bagu*. As these words are the native names of weapons used by the Sea Dayaks of Borneo (included in the work because believed by the author to have been adapted from Malay swords) I am not in a position to say which of the alternative names are correct.

Apart from such minor blemishes, the work is a very good one and will prove useful to anyone interested in the subjects with which it deals. The numerous plates, though not all technically perfect, and in many cases inevitably on a small scale, add much to its value.

C. O. BLAGDEN.

Totenkult und Lebensglaube bei den Völkern Ost-Indonesiens. By Dr. Theo Körner. (= Studien zur Völkerkunde, Band 10). Leipzig: Jordan & Gramberg, 1936. xv + 207 pp.

The geographical area with which this work is concerned extends eastwards from Lombok to the Aru

Islands and northwards to include the Moluccas but exclude Celebes. The subject-matter is indicated by its title but covers a very large number of matters which can be briefly summed up as the customs and observances connected with the treatment and disposal of the dead, and also subsequent thereto, and the notions and beliefs on which these are based, notably the idea of survival after death. The origin of the last-named is discussed by the author at some length after examination of the theories of earlier writers. In each of the three main sections of the work the details are set out in their geographical order and are followed by a brief summing up of the evidence and the author's conclusions, while a general *résumé* is given at the end of the monograph. Though not altogether easy reading, it is a masterly piece of synthesis, its great merit being the way in which an enormous number of scattered sources have been studied and sifted. The bibliography contains 310 items and the text references to these are given in an ingenious though complicated manner, which enables every statement to be checked.

The author's general conclusion is that in this region the ideas about death have evolved, from an original notion that it was only another form of life, to the threefold distinction between body, life force and a shadowy something (hardly to be called a soul, but approximating towards that conception) which survives after death. There is much else that could be said about the contents of this work, e.g., as to the relations between the living and the dead, the places where the latter are believed to go, their ability to return from them on occasions, etc., which it would take too long to enumerate. The book can be strongly recommended to the notice of anyone interested in the region or the subjects with which it deals.

C. O. BLAGDEN.

Marriage Conditions in a Palestine Village. By Hilma Grangqvist. Helsingfors, 1935.

This is the second volume published by the author on Arab marriage and family life in Palestine. The first volume was published in 1931 (reviewed in MAN, 1932, 181). The investigations were made in the Islamic, Arabic-speaking, village of Artās, to the south of Bethlehem. The author had the great advantage of the presence of a European lady, Sitt Louisa (Miss Baldensperger), who has spent most of her life in the village and, besides being almost a native of it, is also a keen student of Arab ethnology and folklore. Her part in the work was very great.

It is not easy to praise too highly Miss Grangqvist's book. Her descriptive powers and use of texts are excellent. Her statistical material is well arranged. Her fieldwork methods have not been bettered by any anthropologist. In recording her material she brings out clearly the way in which formal rules and actual practice affect each other and the relations between individual behaviour and social structure. Social interrelationships are defined and illustrated with great wealth of detail. Social rules are explained both in the words of informants and by citing an abundance of real situations in which they are evoked. It is, moreover, not simply a study confined to marriage ceremonial, or even to marriage relationships, but treats of the conditions of family and kinship life in general. The author is to be congratulated on an excellent piece of work.

E. E. EVANS-PRITCHARD.

SOCIOLOGY

Die menschliche Gesellschaft in ihren ethnosoziologischen Grundlagen. By Prof. Richard Thurnwald. Vol. II. Werden, Wandel und Gestaltung von Familie, Verwandtschaft und Bünden im Lichte der Völkerforschung. Berlin and

Leipzig (de Gruyter), 1932. viii + 360 pp. Vol III. Werden, Wandel und Gestaltung der Wirtschaft im Lichte der Völkerforschung. Berlin and Leipzig (de Gruyter), 1932. vii + 248 pp., 12 plates, and 9 diagrams. Vol. IV. Werden, Wandel und Gestaltung von Staat und Kultur im

Lichte der Völkerforschung. Berlin and Leipzig (de Gruyter), 1935. xix + 377 pp., 6 plates. Prices: Vol. II, R.M. 16.20. Vol. III, R.M. 15.30. Vol. IV, R.M. 22.

Vols. I and V of this work have been reviewed in MAN, 1933, 137, and 1936, 34, respectively. It may be anticipated here that Vol. III, wherein Prof. Thurnwald deals with Primitive Economics, is not identical with the English book by the same author, entitled 'Economics in Primitive Communities' (see the review in MAN, 1933, 21).

The basis of the author's theoretical researches are, firstly, many years of field work, principally in Melanesia and in New Guinea and recently in East Africa; and, secondly, his training in psychology. Being a jurist and, at the same time, a sociologist, the learned author devoted his studies chiefly to the psychological explanation of social institutions and of the social mechanism of primitive communities as a whole. Vol. II deals with the family, kinship, and social gatherings: in particular the concatenation of sex and age, the position of women, marriage, sexual customs (as chastity, promiscuity, and prostitution), the problem of marriage systems, incest, etc.; artificial relationship (adoption, milk-relationship, blood-brotherhood), matrilineal and patrilineal systems in their various forms.¹ A special chapter is devoted to the social position of children: after which the author deals with the status of man at various ages, age-grades, puberty, gerontocracy, and the position of widows. The final chapter deals with various forms of gatherings, in particular with secret societies and kindred subjects. Vol. III consists of two sections, one on 'economy as a whole, its concatenation with the social organism; while the second section is entitled 'The economic function,' embracing, however, rather different topics such as craftsmanship, trade and transport, 'the distributive force of economy,' wealth, capital, labour, wages, labourers, bondmen, slaves, currency, communism, etc., and finally the creative forces of economy in general—in a word, monographs on various subjects which could easily have been grouped in comprehensive chapters and thus brought into a more elaborate arrangement. Vol. IV contains the author's psychological analysis of the underlying principles of social, economic, religious, and political gatherings, of leadership, of the state, of peace and war, etc. The second part of this volume contains, like Vol. III, Part 2, a series of monographs on more or less incoherent themes such as habitations, the rôle of the individual in human society, progress and cycle, extreme forms and special formations, evolution, involution, variation: furthermore, the play of the creative forces of gatherings and civilization: natural selection and elimination, etc. A very useful glossary of sociological terms in both German and English is added as an introduction to the book. This volume is strongly philosophical, it is a summary

of Prof. Thurnwald's sociological theories and therefore ought to be the final volume of the complete work.

Although richly endowed with the results of the author's own field work, the character of these books is of course principally analytical and theoretical, while the underlying material of empirical facts offers hardly any new discoveries. I have a reason for observing this here. For sociologists and anthropologists are queer people; they are sometimes inclined to charge a successful field worker with lack of theory or, at least, with one-sided conclusions and generalizations, while, on the other hand, they like to re-examine the correctness of theories by applying the standards of the limited area that the critic himself happens to control. The many-sidedness of Prof. Thurnwald's field work should raise him above that sort of criticism. He is certainly entitled to deliver, so-to-say, a statement of account of both the results of his own field work collected during almost four decades, and his astonishing knowledge of the literature.

Having briefly sketched the contents of the second, third, and fourth volumes, we may now pass over to dealing with the author's theory and method. Thurnwald suggests that social institutions come into existence by imitating such acts as may be considered to be prefigurative (Vol. II, p. 2). Thus in so far the author is obviously in agreement with Tardé (cf. Tardé, *Les lois de l'imitation*, 2nd ed., 1895, p. xi). But Thurnwald emphasizes the variability of the single institutions in spite of rigid norms and sanctions (Vol. II, p. 3). The social institutions are but details of living social organisms whereby all the social phenomena are mutually and reciprocally interwoven with each other, representing a whole cultural complex (Vol. II, p. 5). These culture complexes, however, are subject to permanent changes caused by wanderings, political and other events. Now the author stresses the fact that not only culture but also mankind is variable: after 100 or even 1,000 years peoples are no longer the same as they were before (Vol. III, p. 42). The social organization of a nation is to a considerable extent the result of her historical fate (Vol. IV, p. 253). The overlapping of cultures one over another is of immense importance here (*ibid.*). However important the functional mode of viewing things may be, we can arrive at a clear survey of the phenomena only by going back to the historical backgrounds (Vol. IV, p. 297). Field work among modern primitive peoples alone, then, may lead us to an understanding of the actual social mechanism, but is of comparatively limited value for the solving of historical or archaeological problems. Historical questions cannot be answered schematically but require special examination in each single case without prejudice (Vol. III, p. 42). Needless to say that the author rejects the obsolete theory of unilineal evolution (Vol. IV, p. 3 and p. 236). Prof. Thurnwald also rejects the construction by Max Weber of 'ideal types,' for these represent, he writes, culminating forms carried logically and aesthetically to an extreme, and thence constructing the increasing decay of an institution (Vol. II, p. 3). In this connexion, it would be interesting to know whether Prof. Thurnwald would wish to extend his criticism to Ruth Benedict's theory of 'Patterns of Culture' (1935) which had not been published when the present work appeared.

The outstanding feature of the author's outlook and method is obviously, as Prof. J. L. Myres put it in his review of the first volume in MAN, 1933, 137, "biological" rather than logical articulation of types and varieties, "as expressions of the result of processes and, above all, " of intercourse, and contamination resulting therefrom." However highly Prof. Thurnwald appreciates the decisive rôle of history, he is far from involving himself in

¹ May I emphasize here that the terms 'Mutterrecht' and 'Vaterrecht' as used by Thurnwald must not be translated 'father-right' and 'mother-right' since the German 'Recht' has two altogether different meanings, signifying both 'Law' and 'Right'; and in this particular case the German term covers undoubtedly the English 'Law' and not 'Right,' thus denoting the whole complex of a specific legal system. Speaking of 'Mutterrecht,' however, we are principally thinking of matrilineal descent and not, at least not in first line, of inheritance, succession, or authority. Bachofen, who inaugurated the term, had also principally descent in mind, though he referred to the other three institutions, too. One is, then, absolutely justified in avoiding the senseless terms 'father-right' and 'mother-right' in English: see 'Notes and Queries on Anthropology,' 5th Edition, p. 58).

the risky undertaking of a historical constructivism, but gives us solid and thus trustworthy cross-sections of certain stages of social development. Thus, if we wish to range him in the hierarchy of leading anthropologists, we must consider him very definitely not as a historian but as an analytical sociologist with an equipment both biological and psychological. His methodological position is related to, but not identical with, the functional theory. There is no doubt these five volumes are a standard work, offering an abundant material of facts, many important general observations, and, last but not least, fruitful suggestions which will certainly not fail to exercise a strong influence on the younger generation of sociologists. LEONARD ADAM.

Die Verstädterung : ihre Gefahren für Volk und Staat vom Standpunkte der Lebensforschung und der Gesellschaftswissenschaft. By Hans F. R. Günther. Leipzig and Berlin : B. G. Teubner, 1934. 54 pp. Price R.M. 1 50.

In this study the author attempts to discuss the biological and social implications of excessive urbanization, with particular reference to conditions in Germany and to the ideals of 'National Socialism.'

He claims that the distinctive Germanic ideal of democracy is based on the concepts of Freedom and Equality of the original rural Teutonic (Nordic) Society; and that modern industrialism, with its urbanization and the consequent growth of a landless proletariat, destroyed the biological and sociological equilibrium of the medieval society. From the new conditions there emerged a concept of modern democracy, based upon urban concepts of freedom and equality which are far removed from those of the Germanic ideal. The latter

can only be realized through 'de-urbanization,' land settlement, eugenic reforms, and the inculcation of the Nordic aristocratic spirit. Urbanization eradicates the best in favour of the more poorly endowed stock. General educability is low, and the affairs of society in an urbanized state are increasingly subject to mass-psychology. Therefore it is necessary to improve the hereditary endowment in accordance with the Nordic spirit. This ideal, which aims at the deliberate eugenic improvement of the mental and physical equipment of the individual, and the realization of 'personality,' is the antithesis of the communism which has its roots in mass feeling. The evolution of such a society is a matter of generations, but its foundations are now being laid in and by the German National Socialist state. Such in brief is the gist of the author's argument. The evident bias of this work makes the reader sceptical concerning many of the author's assertions and conclusions. Thus—"The less rural and aristocratic a people of Germanic Thought becomes, the more must its rule become dictatorial" (p. 24); "The mental health of the Nordic race is more quickly undermined by urbanism than is that of the east (Alpine), west (Mediterranean), and East Baltic races" (p. 25); "Great art and literature have only lasted among past peoples so long as they remained predominantly rural" (p. 42). In discussing the possible adaptation of man to his urban environment the author assumes the practicability of a eugenic improvement of both instinct and intelligence (p. 35).

This essay indicates some of the ideals and assumptions which are being made the basis of the Nationalist Socialist attempts to remould a nation; and as such it deserves careful attention. C. B. FAWCETT.

CORRESPONDENCE.

The Origins of Religion. (Cf. MAN, 1936, 7).

26 SIR.—In MAN, 1936, 7, there is a review by Prof. H. J. Rose of my recent work, 'The Origins of Religion' (Kegan Paul & Co.), in which the reviewer passes a criticism both on my main contention that primitive religion is in essence animistic and not 'pre-animistic,' and upon certain particular statements of mine in regard to classical Greek religion.

A few words in reply seem to me all the more necessary since some other reviewers of my book have, from a 'pre-animistic' point of view, made almost word for word the same remarks. Thus Dr. R. R. Marett, against whose interpretations of certain beliefs and rites a good deal of my own criticism is directed, has had an opportunity to express his diverging opinion in a review of my book published in *Philosophy*, London (April, 1936). Recently the editor of *Folk-Lore*, the Rev. E. O. James, in the September number of his Journal has joined his English colleagues in condemning my book because of its 'thoroughly Tylorian' tendencies.

I must confess that these criticisms by persons who once for all have adopted a different view of primitive religion from mine have been of the greatest interest to me from a purely psychological point of view. They show that dogmatism in science is just as difficult to combat as dogmatism in theology. During the last decades it has been, so to speak, a 'fashion' in certain anthropological circles to hold that primitive religion was essentially 'pre-animistic' or 'animistic,' not 'animistic' as Tylor believed. To speak of animism, spirits, demon-, when we are dealing with the lowest

uncivilized peoples is an irritating heresy. Primitive religion without animism, that is the slogan. Instead of animism, terms like 'mana,' 'orendism,' impersonal power should be used. Prof. Rose regards it as one of the worst of the many 'glaring faults' which he has found in my book that I am 'a thorough-going Tylorian' and insist on animism as the primitive stage of religion. Similarly the Rev. E. O. James categorically states that my studies of the South American Indians have given me 'a distorted view of the part played by the idea of 'the soul in primitive ritual and belief.' He is convinced that there really exist peoples who are not familiar with the notion of spirit. He calls my statement 'one-sided'; he speaks of my 'fatal habit of reducing complex beliefs and practices to a single origin,' and emphasizes twice in his review the danger of putting so heretical a book in the hands of young students who approach the subject *de novo*.

To be just I must add at once that both in England and in other countries my book has also found more objective reviewers, whose judgments have been quite contrary to those just referred to. Thus its chief merit has been said to lie exactly in the 'eminently sane and sound views' which characterize it, and it has been recommended as an excellent text-book for beginners precisely 'because it is critical of recent tendencies' and because of 'the broad, cautious, and even manner in which the conclusions of differing schools of anthropologists are surveyed.' The diametrically opposite judgments which have been passed on my work have indeed given me a strong impression of the relativity of all things.

It may be proper to point out that I have studied the

subject of primitive religion for about three decades, of which six years have been spent in close contact with uncivilized peoples representing different stages of mental and cultural evolution. The conclusions at which I have arrived have, however, by no means been founded solely on the beliefs and practices of these tribes, but to a large extent upon an extensive reading comprising practically all existing types of primitive culture in the world. Many of the peoples whose religious ideas and practices I deal with in my book are, for linguistic or other reasons, wholly unknown, or only most imperfectly known, to, for instance, British anthropologists. I am obliged to call attention to this to make it clear that there is scarcely any real foundation for the somewhat superior attitude assumed towards my book by the critics mentioned above. Primitive psychology is a most difficult subject, and I think that especially anthropologists who have never been able to found their opinions on personal observation of savage life, as is the case with my critics, should be more careful in condemning the theories of those who have studied it in the first hand.

Whereas Prof. Rose and the Rev. E. O. James blame me for having given a distorted and one-sided view of primitive religion, I must myself state that they have given their readers, of whom probably the majority have not read my book, a distorted and highly one-sided idea of the theories, or, rather, hypotheses, I have offered regarding the earliest stages of religious evolution. And this is a serious thing, since in my opinion the first duty of a reviewer is to give a correct statement of the views which are the objects of their criticism.

A brief statement of the most outstanding points in my book may therefore be necessary.

In the first introductory chapters of my book I have called attention to certain fatal errors in the comparative anthropological method, as it is used even to-day: in the first place to the "highly uncritical use of literary sources which is responsible for the unsatisfactory character of most of the older comparative works on the religion, customs, and institutions of the lower peoples." I have said that it is not difficult, even after a superficial glance at the literature used in them, to establish the fact that at least fifty per cent. of the authorities quoted were not qualified to give trustworthy information about the peoples with whom they dealt, and that consequently from a scientific point of view their works are valueless. In this particular respect a new treatment of sociology and the science of religion is necessary. The historian of religion should adopt just as critical an attitude towards the documents he uses as the profane historian.

I have emphasized that science will never be able to trace the first beginnings of religion, and that in dealing with this problem we are merely dealing with hypotheses of greater or less probability. In this connexion I have protested against the misuse of the word 'primitive' by many anthropologists to-day, and especially by 'pre-animists' in the science of religion. There no longer exist any really primitive peoples. There are no *Urvölker* and *Urkultur*, as the culture-history school assumes. It is therefore absurd when anthropologists of different schools have assumed, for instance, the Australian aborigines to be so 'primitive' that among them we can trace the first beginnings of religion, or that the religious evolution we find among them could be taken as representative of religious evolution among mankind at large. The tendency to generalize beliefs which have been found in a single case is another mortal sin of modern anthropology against which young students especially cannot be sufficiently warned.

When Dr. Marett blames me for being 'dogmatic' about animism as a primitive form of religion, this is another charge which I must reject as wholly unjustified. As appears from what I have just stated, I am rather a sceptic in regard to questions of the origin of religion, and a sceptic is not likely to be dogmatic. So far is this from being the case, that the chief aim of my book has precisely been to combat the conspicuous dogmatism represented by Dr. Marett himself and many other anthropologists of the same school.

I have stated that in the primitive savage, as in the higher animals, we can observe a tendency to endow even inanimate nature with a life similar to that in himself and his equals and that we are free to assume that there was a time in the mental evolution of man when he was still at such an 'animatistic' stage in his conception of the Supernatural. If pre-animists only assumed this as a hypothesis in regard to a primeval religious stage of which, in fact, we know nothing and can only form an opinion by way of deduction, I would not deem it necessary to contradict them seriously. But it is otherwise when even now existing savages are set down as 'animatists,' and whole series of primitive, clearly animistic rites and beliefs are deliberately explained as involving no idea of spirits or souls but the supposed earlier notion of an impersonal magical 'power.' Here criticism necessarily sets in. Having carefully analyzed ideas and practices of this kind in South American and elsewhere, I have been bound to term the interpretations given by Dr. Marett in *The Threshold of Religion* as clearly erroneous, and other reviewers have admitted that on this point my criticism of the pre-animistic theory has been destructive. It is curious that Dr. Marett, who in his review blames me for having disregarded his later writings on primitive religion, himself disregards my own works to such extent that in his recent books he has not with a word met the criticism to which, for instance, in my *The Civilization of the South American Indians* (Kegan Paul, 1926), I have subjected his theory of pre-animism. It seems that Dr. Marett either has been ignorant of their existence or has regarded his own position as so strong that he has not considered my criticism worth a reply. If Prof. Rose or other anthropologists do not approve of, for instance, the explanation I have given of certain beliefs of the Fuegians, among whom Dr. Marett—quoting Admiral Fitzroy (!)—tries to assign traces of 'animatism,' they may show that these explanations are incorrect, but only a dogmatic student calls it a 'serious fault' when another scientist, in spite of lengthy and careful investigations, is unable to endorse the view of a certain subject which he has accepted as right himself.

I think one of the most serious faults an anthropologist can commit is when, in his explanations of primitive customs and ideas, he starts from ready-made theories and preconceived opinions, trying thus to find an apparent support for a one-sided theory of primitive religion. In my book I have mentioned several instances of this especially in regard to 'pre-animists' and the supporters of the theory of primeval monotheism.

Throughout my book I have warned readers against the tendency, so frequently met with among anthropologists, to explain a certain religious phenomenon, which occurs in apparently the same form among different peoples, on the same principle or to derive it from the same origin. Thus I have criticized the theory, so common a few decades ago, that religion has sprung from totemism, and that totemism has been universal among mankind. When dealing with the 'Supreme Beings' whom the Swedish Archbishop Söderblom

calls 'Producers,' I say that he has made the same mistake as most other writers on the question, that of unduly generalizing the ideas he has found in a single case. "He has started from the erroneous assumption " that these beings are of exactly the same character " among all primitive peoples and that consequently " it is possible to explain them all on the same principle." Similarly when dealing with sacrifice I have pointed out that there are many different forms of it and that "it is a mistake to try to find a single comprehensive explanation of this rite."

In view of this obvious endeavour of mine, to avoid generalizing statements and to accept different explanations for religious customs, it is more than surprising to read, in the Rev. E. O. James' review, about my "fatal habit of reducing beliefs and practices to a " single origin."

The blame for being 'a thorough-going Tylonan' I beg to meet with pointing out that both the evolutionary school in general and Tylor himself are criticized by me, the latter especially from the point of view that he has disregarded the emotional side of religion, and that he has overlooked the close connexion between animism and magic. On this point I perfectly agree with W. Wundt, the great German psychologist, who also has rightly pointed out that religion can hardly have begun with a belief in abstract impersonal 'powers,' since the tendency to personify the objects of his awe and reverence is characteristic of primitive man. I have stated that animism must now be taken in a wider sense. When my critics assume that my view of primitive religion has been influenced by the fact that I have carried out researches among 'markedly animistic' folk like the South American Indians, they only show ignorance of the beliefs of primitive peoples. The Indians or South America are by no means greater 'animists' than, for instance, the African negroes, the Australians and Melanesians, or the peoples of Siberia. It is just the unfortunate thing for pre-animists, that whereas the universality of the belief in souls and spirits is a fact—on this point Taylor was absolutely right—'animatism' or 'orendism' cannot be proved to prevail among a single people of our own days, and still less shown in regard to primeval man.

As to the remarks Prof. Rose has made against my statements referring to Greek and Roman religion, I find it curious that in a review of a book like mine a reviewer has taken so much pains to point out mistakes which he himself calls 'small' and which, even were his remarks correct, are wholly insignificant so far as my main theories are concerned. But besides this I must maintain that hardly any of Prof. Rose's remarks are justified. It is difficult for me to understand, for instance, how a classical scholar like Prof. Rose can be ignorant of the primitive view referred to in Plato's *Laws* (873), where we hear of a beast, which has killed someone, being tried, executed, and cast beyond the border, a view which has not been characteristic of the Greeks only, but of several other Aryan peoples, and has lingered on as a survival even in medieval Christianity. For literature on the subject, I beg to refer, for instance, to Westermarck's *The Origin and Development of Moral Ideas*, I, 255 sq.

RAFAEL KARSTEN.

The Origins of Religion. (Cf. MAN, 1936, 7; 1937, 26).

27 SIR.—A great part of the strictures passed by Dr. Karsten upon my review of his book amount to no more than this, that he and I interpret the same facts in different ways. It obviously would be unprofitable to

argue the matter out here; a full exposition of our respective views would fill many pages. But I wish to draw attention to one or two matters of fact and principle arising out of his letter.

Firstly, I did not say that his attachment to the animistic hypothesis—I note that he objects to its being called Tylorism—was a glaring fault, but that some might regard it as such. In the next paragraph I say that it may be considered a virtue or a defect, according to the reader's convictions. This, I imagined, would make my meaning clear. I sketch the contents of the book, credit the author with interesting material and shrewd ideas, express my disagreement with some of the latter and point out a few flaws in the former. I find nothing in his letter which makes me repent of my chief objection, that he has not faced the main issue, whether or not animism may reasonably be supposed to have grown out of a pre- or non-animistic attitude of mind. His remarks on the necessity for critical caution in the use of our material I most heartily endorse, and never dreamed of objecting to.

As to my list of small faults, I count it part of a reviewer's duty to note them, both for the protection of the reader and the guidance of the author in future editions of his work. What he means by charging me with ignorance of "the primitive view referred to in Plato's *Laws* (873)" I cannot imagine; I may be wrong in contending, as I still do, that it is not primitive, but comparatively sophisticated, but that is incorrect interpretation, not ignorance. I await a demonstration from him that any of my other corrections itself needs correcting.

H. J. ROSE.

Bead Workers of Ilorin, Nigeria. (Cf. MAN, 1937, 2).

28 An illustration to Mr. Daniel's communication is printed herewith. The native bead-worker sits with his tools spread out before him on the slab of Schist which serves as grinding-stone. Some of these tools are figured above. (MAN, 1937, 2).



FIG. 1. A BEADWORKER OF ILORIN

Palaeolithic Objects from Cresswell Caves.

29 A Special Exhibition has been installed, till about the middle of January, in the Stone Age Gallery of the British Museum, of artifacts and objects of bone and ivory, excavated from the Pin Hole Cave and Mother Grundy's Parlour, Cresswell Crag, by A. Leslie Armstrong, F.S.A., from 1923 to 1936, under the auspices of the Joint Committee of the British Association and Royal Anthropological Institute for excavation of Derbyshire Caves.



A MODERN 'KERNOS' VESSEL OR 'MARSANÉ' FROM TIFLIS.

Photograph by courtesy of the Director of the Ethnographical Museum at Basel.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 30-53

FEBRUARY, 1937

ORIGINAL ARTICLES.

Technology.

With Plate B.

Myres.

A MODERN 'KERNOS' VESSEL FROM TIFLIS. *By Professor J. L. Myres, F.B.A., D.Litt., D.Sc.*

30 By the courtesy of Dr. Felix Speiser, of Basel, Honorary Fellow of the Royal Anthropological Institute, I am able to publish a vessel of glazed earthenware, which, though of recent fabric, perpetuates features of high antiquity, namely, the form of the multiple-bodied *kernos* of prehistoric and classical Greece, and the decoration of a vessel with a clay figure in relief. This vessel is in the Ethnographical Department of the Museum of Basel, and is described in its accessions-register (in English translation) as follows:—

H. c. 109. TIFLIS. Puzzle-drinking-vessel [*Veriertrinkgefässe*]: Georgian *Marsané* of glazed green clay: on its upper margin is a hollow conduit, on which, behind, is set a cylindrical vase, and then on each side five beaker-shaped vases, about 10 cm. high. In front is a vase in the shape of a ram. Height 31 cm., girth 89 cm. Collector, Prof. Egger, Basel, 1914.

The form of the vessel itself, or rather the vase-like pedestal of the puzzle-vase proper, calls for no special remark. Such vessels, with walls perforated or cut away are common throughout the Near East, and imitate openwork in wood or basketry. The rope-coil mouldings are also in general use, from Sumerian to modern times. What makes the vessel peculiar and interesting are (1) the tubular or annular body of the vessel; (2) the cluster of small vessels perched on it: and (3) the spout modelled as a ram's head.

I.

A 'puzzle-vase' strictly is one which when filled with water may be drained without accident by proper manipulation, but spills or engulfs its contents when handled unwarily. An ancient example from an early Iron Age tomb near Kition in Cyprus, is in the Grassi Museum at Leipzig (Myres, *Liverpool Annals of Art and Archaeology*, III (1910), 107, pl. xxix; another in *KBH*, pl. xxix 16 A.B.). Not all annular vases, however, are 'puzzle-vases.' Some are merely tubular-bodied, with a neck on the outer circumference of the ring or rising from a point on the upper side of it when laid horizontally. Some merely have miniature vessels perched on the ring, but not communicating with it: some have intercommunicating vessels but no spout. Only a few have the complete outfit of vessels intercommunicating through the tube, and also drained by a spout, which (to be effective) must, of course, rise high enough above the body to prevent liquid poured into the vessels from running off till the ring is tilted.

The following abbreviations are used in referring to published illustrations:—*Cesnola* = Myres, *Handbook of the Cesnola Collection of Antiquities from Cyprus*, Metropolitan Museum of Art, New York, 1915. CMC = Myres and Ohnefalsch-Richter, *Cyprus Museum Catalogue*, Oxford, 1899. KBH = Ohnefalsch-Richter, *Cyprus, the Bible, and Homer*, Berlin, 1893. BM = *Catalogue of Greek Vases in the British Museum*, Vol. I, 2, Louvre = Pottier, *Catalogue des Vases Peints du Musée du Louvre*. BSA = *Annual of the British School of Archaeology at Athens*. JHS = *Journal of Hellenic Studies*.

II.

Ring-vases of clay are well known among the tomb-equipment of the Early and Middle Bronze Age in Cyprus, and reappear there in the Early Iron Age and Græco-Phœnician period. Some are plain, but others have an animal's head as spout, and sometimes the ring serves as a pedestal for vases and bowls of various shapes, and for small modelled figures of birds, animals, and human beings: on *Cesnola* 521 a man wears a ram's head mask as though engaged in some ritual, like the masked statuettes, *Cesnola*, 1029-30-31.

Sometimes the subsidiary vases and bowls communicate with the annular cavity, sometimes not; and sometimes the annular cavity is atrophied and replaced by a solid ring of clay.

The notion of delivering the contents of a vessel through the mouth of an animal, or a pitcher held by a representative of the pourer is fairly widespread. In Cyprus there is a long series of such vases, with human-headed spouts (*Cesnola*, 936-43), animal-headed spouts (*Cesnola*, 944-50. *CMC*, 1201-45) and woman and pitcher spouts (*Cesnola*, 936-43. *CMC*, 1251-1330. *BM*, C. 356ff. *Louvre*, 187ff).

The origin of the 'ring-vase' is not clear. It is not a form likely to occur to a potter, but may be a skeuomorphic imitation of a leathern vessel, developed from the lentoid flask by fastening together the middle areas of its two sides, and then cutting out their centre; for such modified lentoids, or annular flasks, occur in clay, in Cyprus from the Bronze Age onwards, and elsewhere.

III.

To perch a small vase or bowl on the handle or shoulder of a larger vessel, for mere decoration (like birds, animals and human figures) is not uncommon in Cyprus, from the early Bronze Age onwards, but does not betoken more than freakish ingenuity of the potter. Vases with multiple bodies or necks are frequent in Cyprus from the Early Bronze Age onwards, less common in Crete and the Cyclades, and recorded also from Hissarlik and Yortan (*B.M. Cat. I*, I, pl. ii, A62-63), in north-western Asia Minor during the Bronze Age. Modern examples from Cyprus are figured *KBH*, pl. CL, 22 a, and Gowland found in the dolmen-tombs of Japan both clustered vases on a single foot, and vessels with several smaller vases on the shoulder, associated once with figures of deer and a boatload of men.

(*Archæologia*, LV, 492. 500. pl. xli. 1. 2. 3. 4. 6. 7. and fig. 39).

It is more significant when a considerable number of such vases, uniform or various, supplement or replace the main recipient; for we know that in classical antiquity such multiple vases (*kernoi*) were used to contain samples of different kinds of offerings, or a number of lamps, like the 'seven branched candlestick' of the temple at Jerusalem (1 *Kings*, vii, 48. Perrot-Chipiez. *Histoire de l'Art dans l'Antiquité*, iv, 311). Compare Athenæus, xi, 476f. 478d, Nicander, *Alexipharmaka*, v, 217, "the initiatory bowls on which they set lamps", and in the ritual of Rhea, the Cretan Mother-Goddess, there was a 'kernos' 'bearer' (Schol. Nicander. *l.c.*). Such lamp-stands and their draught-covers have been found at Eleusis (Rubensolin. *Athenische Mittheilungen*, xxiii, 271), and a similar draught-cover at Palaikastro in Crete (Dawkins. *BSA*, x, 221ff, fig 7a). For these lamp-stands, however, there is a distinct use, and another purpose altogether, not to *separate* different kinds of contents, but to *multiply* small units of illumination.

The most remarkable series of such *kernoi*, with many small tubular bodies, comes from the Bronze Age site of Phylakopi in Melos, and is preceded by a much earlier prototype with only three vase-bodies on a single high post (Bosanquet, *BSA*, iii (1896-7), p. 53ff, pl. iv, 2, 3, 4; *Excavations at Phylakopi*, 1904, p. 102, pl. viii, 4; *BM*, A 332 (pl. v). A 343-4-5 (fig 75, 76)). These Melian *kernoi* are so regular in form that they must have served some quite specific purpose. The very large number of component vessels makes it less likely that they were for ritual offerings; they bear no stains of lamp-smoke, and they may have been simply flower-vases, as other Melian vases with a basal drainhole were probably decorative flowerpots. Among people with so keen a sense of natural beauty (as their floral art attests) nothing is more likely.

But it is noteworthy that in one of the small vessels on a Melian *kernos*, now in the Ashmolean Museum at Oxford, were found grains of wheat and what have been identified (though somewhat shrivelled) as peony seeds; these may well have been votive.

Shortly after the publication of Melian *kernoi*, the late Stephanos Xanthoudides, Inspector of Antiquities in Crete, published in *BSA*, xii, 9ff, several Late Bronze Age *kernoi* from graves at

Kourtes, in Central Crete, one of which (*l.c.*, fig. 3) has human figures among its vases; he gave the important information that in the ceremony of the Orthodox Greek Church called *Artoklasia* ('breaking of bread') first fruits of the harvest—loaves, corn, wine, and oil, are carried in procession, blessed, and distributed to the worshippers: and that for this purpose a vessel of metal is used, with compartments like the little vases of a *kernos*. He figured (fig. 6) such an object from the monastery of Toplù in eastern Crete.

Such a 'libation-table' in stone, of Bronze Age fabric, from the Dictæan Cave in Crete has been published by Sir Arthur Evans, *J.H.S.*, xvii. 350ff, *Palace of Minos*, i. fig. 465-6 (p. 627-8). Compare the threefold libation of honey, wine and water to the souls of the departed, in early Greece (*Odyssey*, x, 519; xi. 27).

This exactly explains both the use of the ancient *kernoi* as 'initiatory bowls,' and also the presence of human figures among the ring-vases, especially the masked figure on *Cesnola*, 521, and the animals' heads abbreviated presumably from a complete animal; the birds on other *kernos* were small enough to be represented whole, like the doves on the handles of Nestor's cup in *Iliad*, xi. 632ff, and the gold cup of similar design from Mycenæ. (Schliemann, *Mycenæ*, fig. 346; Helbig, *Homerisches Epos.*, p. 371, fig. 157).

As the modern *kernos* in Plate B has likewise the head of a horned animal serving as spout, among its row of vases, the probability is increased, that it has some such ritual use as the vessel from Toplù Monastery. In the Armenian Church, animal sacrifices at the Eucharist only went out of use about the tenth century A.D., and the *matal*, or animal sacrifice, by a priest for the shriving after the death of an Armenian went on within living memory. (F. C. Conybeare, *Encyclopædia Britannica* (1910), s.v. 'Armenian Church,' p. 569b). It is possible that this *kernos* may have been intended for use in some such ceremony of the Armenian Church.

A FIGURINE VASE FROM TIFLIS. By Professor J. L. Myres, F.B.A., D.Sc., D.Litt. Illustrated.

31 In MAN, 1937, 30 (Plate B), is published an unusual clay vessel from Tiflis, now in the Ethnographical Museum at Basel. Here (fig. 1) is another vessel, of similar provenance and fabric,



FIG. 1. A GLAZED VESSEL WITH FIGURINES, FROM TIFLIS. Photograph by courtesy of the Director of the Ethnographical Museum at Basel.

and likewise interesting for an archaic feature of its decoration, namely, the modelled figures of human beings which surround its neck. In the Basel Museum inventory it is described:—

II. e. 108. GEORGIA. Jug of grayish-yellow-clay with blue-green decoration, and on the neck three human figures modelled in relief. Completely glazed. Height, 48 cm.; girth, 76 cm. Collector, Prof. Egger, Basel, 1914.

The shape of the jug calls for no special remark. It belongs to a series of forms widespread in Anatolia, Syria, and the Nearer East generally, from classical times at least. The attachment of the handle, not to the rim, but to a point far down on the neck, goes back to the red-ware of the Early Bronze Age in Cyprus, and there finds its technical explanation in the gourd-prototypes of that ware, and their modern representatives, the gourd flasks of everyday use. The downturned rim of the neck goes back to early Byzantine or late Græco-Roman times.

The painted decoration also goes back to a simple straw-binding prototype, but the alternation of stippled compartments above and below, converts the mere meshwork into a zigzag band of alternate lozenges, within which the rudely circular rosettes may well be floral.

Around the neck the three small figurines, in 'snow-man' technique, are as primitive, and also as vigorous, as the clay figures from many parts of the Nearer East and Mediterranean shores from the beginning of the Bronze Age and before it. The bird-like face and pellet-eyes are

characteristic. What the figures are doing is not very clear. They stand with their back to the vase-neck, and seem to link arms and raise one foot, while resting on the other. It looks like a line-dance, like the *Sýrtos* and *Kalamatianó* of the Greeks: for there is no attempt to join hands across the handle, and the free arms of the outer figures are akimbo, as is the mode in the Greek dances already mentioned, and their widespread counterparts.

What gives meaning to the performance is the flying bird in the background above the linked arms, and the full-face animal head below, apparently horned, though it is not possible to distinguish horn and ear. In this position they can hardly be without symbolic intent. One thinks of immemorial and ubiquitous fertility-dances, of the widespread bull-symbolism and dove-symbolism connected with such rituals in Minoan Crete and elsewhere. But here the story ends for the present. It is perhaps not wholly accident that these animal-accessories, however meaningless now, have survived in the same ceramic content as the ram's head spout on the multiple-vase already described (MAN, 1937, 30).

GENETICS AND RACE. By Prof. R. Ruggles Gates, F.R.S., Contributed to the Joint Discussion of Sections D (Zoology) and H (Anthropology), at the British Association, Blackpool, 1936.

32 The question of race as applied to mankind is such a controversial and thorny one that we who discuss the subject as scientific men need to do so in a particularly calm and unbiassed spirit. It is, I think, clear that a scientific view of human races must be based to a considerable extent upon our knowledge of race in other organisms and especially in man's nearest relatives, the mammals. We very much need a considered classification of human races, living and extinct, based upon criteria similar to those which have been applied to the classification of mammals, and especially the Primates, into genera, species, subspecies, geographic races and varieties. We wish to know in how far, if at all, the criteria of classification of the higher mammals require modification in their application to man. It is a curious fact that no one appears as yet to have attempted such a thorough-going study from the modern genetical point of view.

One of the most intensive investigations of geographic variations in mammals has been the work of Sumner (1932), extending over many

years, on geographic races of several species of deer mice (*Peromyscus*) which are widely distributed in North America. Sumner's work constitutes a determined attack upon the problem of geographic variation, wide observation of the variability of wild types being supported by extensive genetical experiments in breeding and crossing. Reference may therefore be made to a few of his conclusions. He finds, for instance (*l.c.* p. 26), that "a subspecies is not a homogeneous collection of animals, throughout its entire geographic range. The uniformity is "merely relative." He says, "I have never compared two local collections from points at "all remote from one another without finding "significant differences between them."

Incidentally it may be mentioned that in an extensive genetical survey of *Eurothera* in Eastern Canada (Gates, 1936a), I have found conditions in many respects similar, although for reasons which we need not enter into here, the geographic relationships in plants also differ in certain respects.

These differences may be visible to the eye or

they may only be shown statistically. Sumner's work was the first to demonstrate that the differences between geographic races of mammals are genetic differences and not mere environmentally produced modifications. This is, of course, far from solving the whole problem of geographic variation, but it does settle one fact of fundamental importance.

Sumner's work also throws grave doubt on the idea that the distinctions between geographical races are adaptive to their local conditions.

Rensch (1929), in his book on *Rassenkreise*, holds that one geographic race passes gradually into another, but Sumner and others have shown that while the transition is gradual in some cases, there is a relatively abrupt and narrow transition zone in others.

The work of Schwarz (1928a) on geographic variability, especially in African Primates, is significant in this connexion. For instance, in the African genus *Cercopithecus* ten species are recognized. *C. aethiops*, which various authors have described as several species, he regards as a single species with 16 races, extending all over Africa, south of the Sahara. In *C. leucampyx* are similarly recognized 18 geographical subspecies, in *C. nictitans* 12 subspecies, while certain other species have only one or two. *C. mona* (Schwarz 1928b), which extends through the tropical rain forests of Central Africa from Sierra Leone more than halfway across equatorial Africa, is recognized as having ten subspecies or geographical races within this relatively limited area.

In the gorilla, Schwarz (1928c) recognizes seven races, and in the chimpanzee four (personal communication). It is therefore clear that, so far as monkeys and anthropoids are concerned, a considerable number of geographic races can develop on a relatively small part of a continent. The range of the gorilla with its seven subspecies is from the Cameroons across tropical Africa through the Congo region to Tanganyika.

By way of comparison, the giraffes are an interesting African genus, in which two species are generally recognized: *Giraffa camelopardalis*, the northern giraffe; *G. capensis* extending from Tanganyika to South Africa. These species differ clearly in skull-characters. In the former species six local races, and in the latter four, are recognized, differing in the markings of body, neck and legs, and in some cases with differences in the horns. Thus in a widely ranging large mammal

we have two well-recognized species on a single continent, with numerous geographic variations in each. It is true also that the giraffes extend back to the Pliocene, and their fossils have been recognized in the Lower Pliocene of Greece, Samos, Bessarabia, Persia, North India and China (see Lydekker and Dollman, 1926.)

May we now consider the position as regards the *Hominidae*. Here we have a group of forms, now world-wide in distribution and apparently extending back into the Pliocene. They have been classified into genera, species and races. It has long been a convention, however, to regard all living types of mankind as belonging to one species, *Homo sapiens*. This view requires examination in the light of modern genetical and anthropological knowledge. The living human races are all interfertile, but interfertility is no longer a necessary criterion of species either in animals or plants. This point is too well-known to require further elaboration. Of course it must be recognized that there is no sharp line between species and subspecies, or geographical races; and authors will always differ to some extent in the number of such forms which they would rank as species rather than races. Yet there are large numbers of cases in animals and plants where the ranking of particular forms as species or subspecies is clear and generally agreed upon. These geographical relationships are to varying degrees obscured in man by his greater propensity to wandering and to crossing. But while this has blurred the outlines between many racial types and produced new races, it has seldom obliterated the old types: and, moreover, crossing also occurs between geographic races of animals, although generally to a less extent.

A related phenomenon may also be mentioned here. It is, of course, commonly recognized that human beings are heterozygous for many of their characteristics, some of which are racial and due to crossing, while many others are mutational in origin. That other animals are commonly heterozygous, at least for numerous mutational characters, has been shown by many inbreeding tests of the offspring of wild females. Spooner (1932) found that 13 wild pairs of *Gammarus* included five individuals which were heterozygous for a recessive gene, four different kinds of gene being represented; and from investigations of *Drosophila*, C. Gordon (1936) finds 16 females of *D. subobscura* out of 29

heterozygous, while in *D. melanogaster* eight out of 22 were carrying a recessive autosomal gene.

From the foregoing argument it appears to me that we are justified in regarding the mongoloid, australoid, caucasoid and negroid types of man as representing separate species, each with various geographical races more or less clearly defined. The Nordic, Mediterranean and Alpine types would then be regarded as geographic expressions within the caucasoid species, while the African pygmies or the Eskimos, for instance, would similarly attach themselves to the negroid and the mongoloid species respectively. The justification for this view will depend upon how long these four specific types have been evolving in separate geographic areas more or less isolated from each other. That some would add the Dinaric and East Baltic or other races does not detract from the necessity for a conception of race. The same differences of opinion are held by naturalists regarding every polymorphic genus of animals or plants. The Ainu of Japan are regarded by some as also belonging to the caucasoid stock.

The general view of four living human species which I have presented has, I think, been greatly strengthened by the conceptions recently put forward by Sir Arthur Keith in his presidential address to the International Speleological Conference at Buxton, 1936. The current conception has been that the white, black, brown and yellow types of man have evolved from a common ancestral stock since the middle Pleistocene. But Keith (1931, chapter viii) had already brought evidence to show that the Bushman type has evolved *in situ* in South Africa from the Strandloopers and the still earlier Boskop type, this evolution involving, among other things, a progressive diminution in cranial capacity. He had also suggested, from less certain evidence, that a similar evolution *in situ* may have taken place in East Africa. He has now, it appears, broadened this general conception into a theory of the independent and parallel development of modern races in at least three widely separated areas of the earth's surface. Keith points out that *Sinanthropus* or Peking man already has certain characters of the modern Mongolian, while *Pithecanthropus* has certain australoid features and the

Kanam skull from East Africa has resemblances to the modern negro type. He therefore tentatively suggests that at the beginning of the Pleistocene the ancestors of Mongols, Australians and Negroes were already in occupation of their present continental areas: the home of the Australoid type would be Southern Asia before their descendants reached the Australian continent: the earliest Caucasian type being similarly late-Pleistocene Cromagnon man which, he suggests, originated in Western Asia and spread into Europe.

Sir Arthur Keith points out that this hypothesis involves the subsequent parallel development of these races, or as I would be inclined to say, species, involving similar alterations in teeth, jaws, brain, etc., down to modern times. In 1926 I expressed the view here presented in the following words (p. 469): "If these colour-types [of mankind] could be viewed from a quite impersonal biological point of view, it is probable that they would be recognized as differing in ways that are analogous to the differences between many animal species."

Lest this amount of independent parallel evolution should seem excessively large, it is necessary to point out the astonishing amount of parallelism in the evolution of all groups of plants and animals which has been revealed in recent years. The subject has been discussed elsewhere (Gates, 1936b). As regards the Primates, Le Gros Clark (1936) has emphasized the great amount of parallelism to be observed throughout this group. This includes parallel development between lemurs and monkeys, between Old World and New World monkeys, between man and gorilla, between *Eoanthropus* and *Sinanthropus*, and between certain other different types of human skulls. The great evolutionary significance of such parallelisms is only beginning to be recognized.

Superposed upon the evidence of human phylogeny already considered, there is strong evidence from the blood groups (*see* Gates, 1936c) combined with other anthropological resemblances, that the Australian aborigines, the pre-Dravidians of India and the Bushmen of South Africa, are descendants of a common type which spread across Southern Asia and into Africa at an early period, since they have the A blood group with only a small amount of B introduced by modern crossing.

It is my contention that there is no incongruity between the picture just drawn of the evolution of the main types of mankind in widely isolated areas over long periods, and the intermingling, often on a large scale, of these various types at points where they came into contact through spread and migration. Such intermixture has, as I have frequently pointed out (*e.g.*, Gates, 1923), taken place extensively at various times, and places throughout the history of mankind. I agree with Professor Fleure that there is probably no such thing as a pure race of mankind. But this is very far from denying the existence of races, a view which Huxley would have us accept.

I differ from Huxley (Huxley and Haddon, 1935), in that I think he unduly magnifies the amount of crossing and interpenetration which has taken place in earlier human history, in comparison with the factor of isolation, the latter being essential for any racial differentiation to develop. We even read (p. 144): "The racial concept. . . is almost devoid of biological meaning as applied to human aggregates." Any naturalist who makes an intensive study of any variable group of plants or animals, will find all sorts of intergradations, cross-relationships and puzzles of distribution which can only be solved by prolonged investigations. Such differences as exist in problems of human distribution are mainly in degree only and not in kind. It is, to me, surprising that anyone who takes a general view of human types and their history could be led to deny the existence of races in mankind.

As regards the genetic nature of the differences between human types, a few of them are recognized as adaptive in nature. The narrow nose of Eskimos and some other peoples in high latitudes and the broad nostrils of the tropical negro indicate that the nasal index is affected by the temperature and moisture of the air breathed (*see* Davies, 1932). The black skin of various races and its higher glandularity, at least, in the negro, also appear clearly as adaptations, but I doubt if the same can as yet be affirmed of any other racial differences. The evidence seems clear that hair types are strictly non-adaptive and that they have arisen as mutations without reference to environment. Woolly hair of the negro type has, for instance, arisen in a Scandinavian

family of pure descent (Mohr, 1932) and been transmitted through five generations.

The nature of the character-differentials between human races cannot be further considered here, except to point out that there is evidence of definite shape-factors determining cephalic index, and of numerous size-factors affecting stature. The origin of all such differences can be reasonably explained on a mutational basis. Finally, it may be pointed out that duplicate factors are concerned in many racial differences such as skin colour (*see* Gates, 1929, Chapter XVI). In eye colour there is probably a series of intensifying factors in addition to the blue-brown pair, the American Indian having one such intensifier which is not present in Europeans. While the presence of such multiple and modifying factors is characteristic of species, especially in plants, yet Sumner has shown that in *Peromyscus* they are characteristic of geographic races. The case for the recognition of the colour varieties of modern man as species therefore rests mainly on the number of differences involved and the long period during which they are believed to have undergone independent evolution in isolation on different widely separated continental areas.

REFERENCES.

- CLARK, W. E. LE GROS: 1936.—'Evolutionary parallelism in human phylogeny.' *MAN*, 36, 4-8.
 DAVIES, A.: 1932.—'A re-survey of the morphology of the nose in relation to climate.' *Journ. Roy. Anthropol. Inst.*, 62, 337-359.
 GATES, R. RUGGLES: 1923.—'Heredity and Eugenics.' London: Constable, p. 288.
 1926.—'Mendelian heredity and racial differences.' *Journ. Roy. Anthropol. Inst.*, 55, 468-482.
 1929.—'Heredity in Man.' London: Constable, pp. 385.
 1936a.—'Genetical and taxonomic investigations in the genus *Oenothera*.' *Phil. Trans. Roy. Soc. B.*
 1936b.—'Mutations and Natural Selection.' *Amer. Naturalist*.
 1936c.—'Recent progress in blood group investigations.' *Genetica*, 18, 47-65.
 GORDON, CECIL: 1936.—'The frequency of heterozygosis in free-living populations of *Drosophila melanogaster* and *D. subobscura*.' *Journ. Genetics* 33, 25-60.
 HUXLEY, J. S. and HADDON, A. C.: 1935.—'We Europeans: a survey of racial problems.' London: Cape, pp. 299.
 KEITH, SIR ARTHUR: 1931.—'New Discoveries relating to the Antiquity of Man.' London: Williams and Norgate, pp. 512.
 LYDEKKER AND DOLMAN: 1926.—'Game Animals of Africa.' pp. 348-367.

- MOHR, OTTO L.: 1932.—'Woolly hair a dominant 'mutant character in man.' *Journ. of Heredity* 23, 345-352; figs. 8.
- RENSCH: 1929.—'Das Prinzip geographischer Rassenkreise und das Problem der Artbildung.' Berlin: Borntraeger, pp. 206.
- SCHWARZ, E.: 1928a.—'Notes on the classification of the African 'monkeys in the genus *Cercopithecus* Erxleben.' *Ann. & Mag. Nat. Hist.*, Ser. 10, Vol. 1, pp. 649-663.
- 1928b.—'Stadien der Artbildung: Die geographischen 'und biologischen Formen der Mona-Meerkatze.'

- Zeits. f. Abst. u. Vererb. Suppl.*, pp. 1299-1319.
- 1928c.—'Die Sammlung afrikanischer Affen im 'Congo-Museum.' *Rev. de Zool. et Bot. Africaines*, Vol. 16, fasc. 2, pp. 48.
- SPOONER, G. M.: 1932.—'An experiment in breeding 'wild pairs of *Gammarus chevreuxi* at a high temperature, with an account of two new recessive types 'of red eye.' *Journ. Marine Biol. Soc.* 18, 337-353.
- SCUMMER, F. B.: 1932.—'Genetic, distributional, and 'evolutionary studies of the subspecies of deer mice (*Peromyscus*).' *Bibliogr. Genetica* 9, 1-106.

BEE-KEEPING IN THE WADI DU'AN. By W. H. Ingrams, O.B.E. Illustrated.

33

The honey of the Wadi Du'an is famous throughout the East, and a description of

while it is highly esteemed, it is considered very heating and may not be eaten by pregnant women. If there is much rain during April and May, the bees make a black honey called *helb*, and they are said to grow much stronger for they consume this honey themselves. The bees collect the crop in twelve to twenty days, and when the owner sees that the hive is full, he fits on more sections until they have finished. Thirty to forty pounds of honey are collected from a single hive at each crop. The honey is gathered by smoking the bees out from behind. When they have gone,



FIG. 1. A BEEHIVE IN WADI DU'AN.



FIG. 2. SWARMING APPARATUS.

bee-keeping in Du'an may be of interest, particularly in view of points of similarity with Western methods. The hives (fig. 1) are tunnel-like structures fitted into the walls of the houses, and consist of circular sections about a foot in diameter. In the outside wall is a small hole through which the bees enter and leave the hives. Du'an enjoys two honey crops in a year, that of June, July, and August being regarded as the best, for at that time the bees collect the honey from the blossoms of the 'alb trees (*Zizyphus Spina-Christi*, L.). The honey obtained during the second crop, from November to March, is gathered from a small bush called *qarmala* and,

the exit hole is stopped up and the honey is taken, one section being left for the bees. In times of drought, honey is put into the hives for the bees to eat.

When the bees swarm, the owner takes a mat (fig. 2) and rolls it up into the shape of a hive, closing one end, and sprinkling perfume inside. He takes the queen (called *ab* = 'father') out of the swarm and puts her into a small cage made for the purpose. The cage is then placed inside the rolled mat. An assistant beats a tin and the swarming bees come to the queen. The swarm is then carried to the hive, the queen bee and her cage put into the hive, and in go the bees after her.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS

Natives of the Western Desert of Australia. *Summary of the description of a film shown by Norman B. Tindale : 5 January, 1937.*

34 In 1933 Mr. N. B. Tindale (Ethnologist at the South Australian Museum, Adelaide) accompanied by Dr. C. J. Hackett, visited the country in the north-western corner of South Australia to study the natives of the Pitjandjara tribe. The expedition was organized by the Board for Anthropological Research, University of Adelaide, assisted by a grant from the Australian National Research Council. With eighteen camels carrying water and supplies they wandered in the company of Pitjandjara natives, traversing the Mann Ranges and much of the parallel-sand-dune country to the south of that desert range. Mr. Tindale took the major part of the film, representing 'A day in the Life of the natives of the Mann Range' on three successive days of a journey across the Mann Range and in the sand desert south of it. At this time the nomads had ceased to take special notice of their white companions. For the purposes of the film the action has been condensed into the story of one day. The people are unacquainted with the camera and are not conscious of its presence.¹

Reel I.—The Mann Range, with its rugged Archæan granite contours is shown against a background of red dust haze. Just before dawn the people are sleeping between their fires, lying on the sandy ground in the shelter of their breakwinds. An old man has slept badly, disturbed by the cold of a winter's night (temperature 22° Fahr. at 6 a.m.) His complainings lead to excited talking and the old man is accused by his daughter's husband of some ancient act of incest; in the dawn light men grasp their spears and await the development of the quarrel. Children are only mildly interested in the dispute—they play near the fires. As the sun rises higher young men sit, their spears freshly sharpened, waiting for the day's hunt to commence. An old man scolds the sluggards who linger around the fires. About 120 men, women and children leave camp on their ten mile journey, lighting many fires along the route of march to help keep themselves warm. Hand-fires are carried, also to promote warmth.

About noon they cross the last pass and disperse over the sandhills in search of food. A man and a boy follow dingo tracks—they find and set fire to a rat's nest.

Reel II.—Grass is fired to help in driving emu (a species of rock-frequenting kangaroo) towards an ambush. Children hunt for grubs—they capture a bird and a marsupial mole (*Notoryctes typhlops*).

Women go in search of vegetable food. Tall kurrajong trees, bearing rather inaccessible seed pods, are discovered. Crows, feeding on the fruits, deposit undigested seeds around the rockwater holes. A child discovers several bushels of the food. His mother and grandmother clean and winnow the seed; their day's work so fortunately ended, they sit in idleness and rest.

¹ See C. J. Hackett, *Geogr. Magazine* IV, 4 (1937), pp. 287-304.

Weary hunters arrive at the new camp with game. Many have broken spears. Men prepare and cook a wild-dog while an old man fetches a rather crooked stick to use in making a new shaft for his spear.

Reel III.—Men eat the freshly cooked dingo, basking in the afternoon sun (temperature about 95° Fahr.), after which one sleeps, another walks about and talks, while the majority commence to grease and repair their weapons. One man burns decorations on a hair pin—another chews sinews and re-lashes a broken splice on his spear. The old man makes his new spear shaft, cutting it with a stone-axe and using the sole of his foot as a work bench.

Children arrive and are given food—they eat and play. Some children have no food because they may not receive it from those present; children must conform to adult sociological taboos.

In the late afternoon women arrive. They fetch water from the rockhole in wooden dishes. There is an exodus in search of firewood. An old man prepares his night camp behind a breakwind. A woman brings water to her camp. The chill of evening draws everyone to the camp fires where the incidents of the day are related. The camp dogs—excited by the smell of food—prowl restlessly around as the shades of night fall over the scene.

The above film was taken in an area set aside by the South Australian Government as a Native Reserve. Owing to the remoteness of the Mann Range from country occupied by white men (Oodnadatta, the nearest outpost township is over 500 miles away) there has been little contact with Europeans, and cultural breakdown has been prevented. The people still use only stone implements, which are all of a simple 'paleolithic' type—they are unacquainted even with the use of ground-edge stone axes.

They also lack the boomerang. Their social organization is of simple character—they have no class system, but the alternate generations are named. Thus own generation (includes grandparents and grandchildren) are *Nganandaruka*, while one's parents and children are *Tjanamiltjan*.²

The Swanscombe Skull. *Abstract of a communication by A. T. Marston, L.D.S., M.R.C.S. : 12 January, 1937.*

35 The occipital and the left parietal bones of this skull have so far been recovered, the former in June, 1935, and the latter in March, 1936. Both were found in situ, in the same layer and 24 feet below the surface of the soil in the middle gravels of the 100 foot terrace of the Lower Thames at Swanscombe, Kent.

The two bones are complete; the occipital preserves the basilar process, the condyles, and the foramen magnum.

The discovery is of particular importance both in respect of the light it throws on the evolution of Pleistocene Man in Britain, and also because of the peculiar significance of its geological horizon

² See Tindale, N.B. *Oceania*, VI, pp. 199-224, 1935.

which is expected to reveal an important aspect on Pleistocene stratigraphy.

In its relation to other fossil types, the occipital region differs markedly from the Neanderthal types, and approximates closely to the Piltdown type. It is felt that the new skull is to be regarded definitely as a precursor to the Piltdown type.

In respect of such features in which comparison between Swanscombe and Piltdown is permissible, Swanscombe is more primitive. The features of the endo-cranial cast, as well as those of the outer surfaces of both of the bones, point to a much more primitive stage than Piltdown.

Human Remains from Kanam and Kanjera, Kenya Colony.

36 In 1933 the Royal Anthropological Institute convened a Conference at St. John's College, Cambridge, to examine and report upon material and other evidence relating to the antiquity of man in East Africa, submitted by Dr. L. S. B. Leakey. The Report of this Conference, specifically based on the evidence then before it, was published in *MAN*, 1933, 66.

In consequence of further observations on the sites, and on the nature of the evidence submitted in 1933, which appeared in a letter from Prof. P. G. H. Boswell, in *Nature* (Vol. 135 (1935), p. 371), the Council of the Institute offered to Dr. Leakey an opportunity for further discussion at a similar Conference.

Dr. Leakey's acceptance, and his letter which appeared in *Nature* (Vol. 138 (1936), p. 643), were

agreed preliminaries to this discussion; and without delay invitations were issued for a meeting of the members of the Conference of 1933 on 16 December, 1936.

On further consideration, however, Dr. Leakey wrote to the President of the Institute, in a letter dated 27 November, 1936: "I was willing and even anxious for a discussion immediately after my return from East Africa, over a year ago, and so I think was Professor Boswell. Now, however, I think it would be much better to let the matter rest where our letters to *Nature* leave it."

The Conference was accordingly abandoned, the Council expressing the view that the two letters published in *Nature* must be regarded as profoundly modifying the conclusions drawn by the conference of 1933 from the evidence submitted to it.

The Nuer Family. Abstract of a communication by Dr. E. E. Evans Pritchard: 26 January, 1937.

37 The Nuer family comes into being as a full union upon payment of cattle and the birth of a child. All children born of a union brought about by payment of cattle belong to the kinship group of the man who paid the cattle. But often widows live with men unrelated to their dead husbands, so that the children born to them belong to a natural family which is distinct from their legal family. Often, too, unmarried women have children by a number of lovers. The lecturer illustrated the complicated family relations that ensue, by describing conditions in a typical Nuer village.

REVIEWS.

AUSTRALIA.

The Red Centre. Man and Beast in the heart of Australia. By H. H. Finlayson. *Australia: Angus & Robertson*, 1935. (*Australian Book Co.*, 37, Great Russell Street, W.C.1.) 146 pp., 52 photographs. Price 7s. 6d.

The author is the Hon. Curator of Mammals in the Adelaide Museum, and spent thirteen months of the summers of 1931-35 in exploring what he calls the 'Red Centre' of Australia. The territory which he describes is west of the railway line to Alice Springs, and lies between the Tropic of Capricorn and latitude 28° 30' south. It includes country belonging to the States of West and South Australia, and also to the Commonwealth Government. The map at the end gives one an excellent idea of the nature of the country, and also illustrates the author's travels in the 'Red Centre.'

The name 'Red Centre' is based on the colour of the sand and soil, and of most of the rocks and mountains, which are of a 'fiery carnabar' colour. The mountain peaks run up to 3,000 feet high. The foliage of the trees in the 'Centre' is of a clear green colour, so different from the grays and dull greens in the other parts of Australia. The rainfall is not over eight inches, and the surface waters are few. The face of the country is varied, and the term 'desert' is by no means applicable to it. It is often attractive and highly picturesque. The country is composed of sand hills (not moving), mulga-scrub, grasses, park lands, with ranges interspersed, and but little flat land. Fogs occur, probably

caused by the sand of distant storms. Summer day temperatures may run up to 120°, but the nights are quite bearable. The winter climate is pleasant.

The author was enchanted with the beauty of the red granite tors of the region, especially with 'Ayers Rock,' 1,100 feet high, 1½ miles long by ¾ of a mile wide, a smooth unbroken ovoid, polished in places, and glowing red in colour. Of the three conglomerate domes of Mt. Olga he writes, "Five times I saw the sun set beyond Mt. Olga, but in five hundred times it would not pall."

The westernmost portion of the area studied consists of three native Reserves, controlled by the three Governments of the area. 'Civilization,' in the shape of cattle and sheep holdings, presses hard on the east and south-east borders of the Reserves, and the author is concerned as to the problem of maintaining the Reserves inviolate. It appears that white men, prospectors for gold, dingo hunters, fowlers (the flocks of budgerigars at the waters cover acres), move in and out of the unsettled parts, and in some cases their influence is not for the good of the natives. Surely it is high time for one policy of administration to be set up in Australia for dealing with the 'blacks,' and for the Federal Government to assume control over them all. Only thus can the present anomalies and injustices cease, and the preservation be assured of at least some of the 'blacks.'

Finlayson is an admirer of the 'blacks,' for whom he

proposes the native name of *Waddi*, a local name which the 'blacks' of the 'Centre' apply to themselves as distinguished from white men. He speaks highly of their general kindness and faithfulness, and helpfulness to the whites; of their services as guides, finders of water, and as shepherds and trackers of wandering stock. He fears that the coming of 'civilization' will further deplete their numbers and turn them into the 'black' fellow of other parts, whose extinction is only a matter of time.

The natives of the 'Centre' live mainly by hunting. The men use long spears to get the game, kangaroos, rock wallabies, and emus. The women dig out the small indigenous mammals and also the rabbits. The natives of the area studied have no name for themselves as a whole, and the author calls them *Luritja* (= 'stranger'), a name applied to the easternmost section of them by the Aranda people whose territory they touch. They all speak more or less the same language. They move about in family groups containing up to twenty or thirty people.

There is little of pure anthropological interest in the book. Several chapters, however, are devoted to the 'blacks,' and contain a defence of them as against their detractors. The author was well aware of their value and services to the white man, and of the treatment meted out to them in general in the past.

He fears that the presence of the wild native dog, the spread of the feral cats, and of rabbits and foxes, together with indiscriminate shooting, will in the end lessen considerably the numbers of the native fauna, and will threaten the extinction of the many interesting and peculiar mammals and rodents of the 'Centre.' He pleads for the establishment of a National Park to run concurrent, presumably, with the area of the Native Reserves.

Two chapters deal with the 'animal life' of the 'Centre'; and a third describes the finding and capture of specimens of the supposedly extinct Plain Rat-Kangaroo, *Calopogonys campestris*. Two chapters contain an eulogy of the camel as a means of transport 'a grateful exception to the many faunal introductions' into Australia.

There is a chapter on motor transport in the 'Centre,' and a vivid description of the patching of a radiator with dough, after other materials had failed.

Indigenous rodents are common in the 'Centre,' contrary to the idea generally held that the Australian fauna is mainly marsupial. The author says that the habits of the mammals of the 'Centre' have been developed under less rigorous conditions of climate than the present, and adds that if the 'Centre' be a 'desert,' as is generally stated, then it is 'the veriest new-comer among deserts.'

Black and White in East Africa. By Richard C. Thurnwald. London, 1935. Price 21s.

41 This work is a noteworthy achievement. It is a report by an experienced student and his wife consequent on a year's study of the problems of native life, mainly in Tanganyika Territory; a brief visit to Kenya was however included.

The unbiased attitude of the author is praiseworthy. He considers matters as they were at the time of his visit, and does not waste time deploring any particular state of affairs, with a faulty conception as to how it came about; the latter attitude is too often found among transient observers.

The aim of the work is set forth by the author as emphasizing the dynamic nature of the transformation which is taking place in Africa owing to the social

The photographs are excellent and are the author's own taking. One notices the spelling 'brethern' twice for 'brethren,' and on p. 25 'grassy pounds' should surely be 'grassy mounds.'

WALTER IVENS.

Entwicklung der Menschheit von den Ur-Australien bis Europa. By Dr. C. Tauber. Gerthlein. Zurich n.d. 138 pp.

39 The arguments of the author in this little book are based mainly on linguistic evidence, although he occasionally quotes certain physical characters. His main thesis is that the earliest civilization started in Australia. He deals with a succession of Urvolk and Ur-languages until by what can hardly be a coincidence he arrives in his second civilization at the veritable Ur (of the Chaldees) itself. His third civilization reaches higher things, and the last in the catalogue is Cosmocrays. The present reviewer is not in a position to discuss whether or no the parallels between Maori and Sumerian, amongst other things which the author brings forward, are or are not significant. It must, however, be remembered that if we are to follow the biological analogy so ably set forth by W. D. Matthews, we should expect, in Matthews' own words, that "the most advanced" stages should be nearest the centre of dispersal, the "most conservative stages farthest from it." The author of the present book argues in the inverse sense, but until there is a large body of evidence to upset Matthew's work, one must rather regard the parallels which exist, and they are certainly many from the physical point of view, as rather suggesting not a movement from the antipodes but rather the survival along the fringes of the world of primitive types. Biological analogies would certainly suggest a series of waves from a centre which has as yet been unlocated. While, therefore, primitive survivals and parallels may be of the greatest value in helping to reconstruct past history, they do not necessarily support any argument which makes the evolution of man proceed not centrifugally as the general teaching of biology suggest, but centripetally as the author of this book would claim.

L. H. D. B.

Primitive Hunters of Australia. By Wilfrid D. Hambly. Field Museum of Natural History. Chicago. Leaflet 32. 69 pp. Price 30 cents.

40 This booklet deals superficially with various aspects of Australian culture without treating any of them in detail or indicating their relative importance in social life. It is intended as a guide to a collection of Australian specimens in the Museum, and, because of its limited scope, is of little value for any other purpose. It contains a bibliography, from which several important contributions are missing. RALPH PIDDINGTON

AFRICA.

contact between the White and the Black. The effects of the impact of Western civilization are fully realized by all administrators working in Africa, probably by most missionaries and by thoughtful colonists, for all unavoidably are doing their share in the disintegration of the old order. The administrator is remodelling the indigenous system of government, the missionary actively undermines the spiritual beliefs of the people and the colonist and trader are steadily revolutionizing the old native economic order. The process is inevitable and cannot be reversed.

As the author, however, points out, this is no new thing. Contacts have been in progress from the most distant times. We have only to consider the effect of the contacts of the ancient Egyptians, the Greeks and then the Romans, and the way that many of these

persist up to to-day. To take a pertinent example, Roman law cannot yet be said to be dead, for it permeates the legal structure of the Western world at the present time.

The difference between examples from the ancient world and that of to-day is that the *tempo* is vastly accelerated in this era, and in addition the ethical sense of the European rulers has quickened, and people have become more introspective regarding the effect. The perplexities which ensue have, it is realized, become a problem for the whole of the civilized world.

This being so, it is good to find an eminent sociologist stating the case, and that is exactly what the author has endeavoured to do. He wisely sets out, first of all, to picture conditions prior to the so-called impact of European civilization. He then deals with present administrative conditions, and so proceeds to an analysis of the changes in the economic structure; and his wife here contributes a chapter on the changes of the family life and the status of women. We then come to an able review of the educational system as developed by the local governments, and are glad to see that he frankly admits that "hardly any institution is accomplishing so much in the way of improving native life as the 'Jeanes School,'" and few will be found to contest this view.

Possibly the most important section of the work is the one which deals with "changes of the mind," and here the writer's training in psychology is of value, for this is a field in which up to now but little has been done. Psychological research must be based on the study of the individual for this purpose, and numerous essays of educated natives, and even folk-songs, are laid under contribution for careful analysis.

A study of the operations of the mind of the native will in time, it is believed, furnish the key to much that at first sight appears puzzling in native character and it will further do much to explain its reactions to the incoming civilization, for, as the author points out,

"The African in his present state of transition has lost the fundamentals of his previous system of thought." In the pre-European epoch a mental equilibrium had been reached, more or less generally; but events of the last 30 years have introduced disharmony, and the problem before us is not what we can do, but what the African can make of the situation, with our advice. To quote again, "The registration of new acquisitions within a cultural system is not sufficient, new things adopted by contact do not mean the end of the process but on the contrary the beginning of a new pattern."

It might, perhaps, be expected that, after his survey, the author would tender advice to those who on the spot are concerned with the future of the African. He has, however, been very reticent on this point and his wisdom is commended, for it is patent to those of long experience that no panacea exists; each section of the people needs guidance in directions varying with its capacity and with due regard to its old social structure. Another great problem, however, is how the 'guides' are to be trained: for it is obvious that this is not a function to be gaily assumed by well-meaning amateurs, be they missionaries or schoolmasters.

A close study of this work by all who have to work among Africans is recommended, for it clarifies the problem, and sorts out the inherent difficulties which many have for long apprehended, but have not been able to express in a concrete fashion. C. W. H.

Im Lande des Gada: Wanderungen zwischen Volkstrümmern Südabessinien. Herausgegeben von Ad. E. Jensen unter Mitarbeit von Hellmut Wohlenberg und Alf Bayrle, mit Beiträgen von Leo Frobenius. Stuttgart, 1936. 608 pp. 40 plates. 174

figs in text. 3 maps. Deutsche Inner-Afrikanische Forschungs-Expedition.

The twelfth of the well-known series of Expeditions organized by Herr Leo Frobenius had for objective researches in Southern Abyssinia, North Africa, the Egyptian oases and the Transjordan. This important volume embodies the 'rich results' obtained in Abyssinia. Other volumes will be published shortly, Dr. Jensen, the leader of the Expedition to Abyssinia, gives an exhaustive analysis of the scientific data obtained, while Herr Studienrat Wohlenberg, with the collaboration of Dr. Jensen, is responsible for the journal of travel. The artist Herr A. Bayrle has enriched the volume with numerous sketches. Herr Wohlenberg provides a chapter on the prehistoric megaliths discovered, and these are well represented by excellent photographs. Herr Frobenius himself writes a general introduction, and also one to the Folklore section, which contains seventy-seven tales, histories, fragments of myths and animal fables.

One can hardly over-rate the importance of this remarkable study, of a little-known culture.

Here once more is something new, which is also very old, from Africa. The Journal itself is almost an epic of travel. As we read we wander among some of the most interesting tribes on the Earth, tribes which have been lately dragged from obscurity by the cycle of fate and a dramatic irony, to appear for a space in the limelight of the World's stage. And as we traverse that interesting region between the two salt seas of Abaya and Tschamo (chamo) passing over 'The Bridge of God,' time is non-existent and we are back in the Old Neolithic, or even in the Middle Stone Age. The past and the present are one and indivisible. The main theme is the culture of the Negro tribes, which is linked up with pre-history: but the contacts of these tribes with the ruling class of the Amhara are revealed in interesting occurrences which throw light on many present problems. The Amhara are people with a Semitic language and a Hamitic soul. They are roving warriors. Arms are their prerogative. They move their towns about like pieces on a chess-board. Their culture is overlaid with foreign influences: Christian religion, Byzantine art, old Roman law, script and clothing; nevertheless at heart they are pure Hamites. Their women have influence and dignity of position. "When the Amhara lady sneezed, all the servants bowed low." "What the woman says, counts." The contact of Amhara with Galla may result in future absorption to some extent of the latter into the former. But attention is drawn to the differences between the tribes commonly included under the name Galla.

The itinerary led through a region inhabited by Negro tribes, and a special study was made of the Darassa and the Konso. Among other tribes with which the Expedition came into touch were the Arussi, Allatscha, Sidamo, Wallamo, Galla-Gudju, Djam-Djam, Burdji, Badito, Borana, Dorsse, Keura, Guraghe, Gato, Gidole, Wuato. Perhaps the most primitive are the Wuato, who, like the Chopi in South East Africa, are 'archers,' the only folk in Abyssinia using bows and arrows instead of spears and lances.

So very much valuable ethnographic material of general interest is found in the narrative, that one finds oneself wishing for still more. We should, for example, have liked to have learnt something of the kinship systems and nomenclature of some of the more important tribes: the kinship behaviour patterns. The children and the circumstances of their life are hardly mentioned in the Journal, although isolated remarks in Dr. Jensen's monograph make one think that they are often subjected to extraordinary conditions. Again, in some

subjects the wealth of detail is somewhat overdone, as for instance, the pages which are devoted to the descriptions of 'the dances which the boys led' the explorers (to use their own words), important as these may have been in the conduct of the Expedition.

Dr. Jensen traces the probable connexion of the carved wooden figures set up in commemoration of the dead by the Konso and Gato people, with the numerous and important old Neolithic megaliths and menhirs. The fertility cult which gave rise to these has its roots in prehistoric times, perhaps in the Middle Stone Age, and has wide ramifications at the present day. It may be that in the light of the new discoveries made by Dr. Jensen among the Darassa and Konso, our present knowledge of fertility rites in Africa will have to be revised and their functions studied from a new point of view. Dr. Jensen finds that the whole tribal organization, religious, political, social, legal and biological, is founded on a system which he calls the 'Gada' system among the Darassa, and the 'Djila' system among the Konso. The extraordinary office of 'Gada' is bound up with a complicated system of age-grades, marriage-classes and religious functions. Every Gada within the system is the highest priest and tribal leader in a democratic oligarchy. The connexion of the Konso rites with agriculture leads Dr. Jensen to some interesting speculations on the U-typus of combined agriculturism and nomadism. The conclusion of the research suggests that there is the closest possible connexion between the Gada organization and death ceremonies, and the prehistoric megaliths. All religious rites depend on the two elements of fertility and death. This brings the Abyssinian 'Negro-stratum' into close cultural relationship to the Nilotic tribes of the Sudan, especially the Bari, who also erect carved wooden figures as death memorials. Dr. Jensen also notes the similarity of the Konso terraces to those of the Inyanga ruins in Southern Rhodesia, and opines that the 'Gidoma' tower of the Konso resembles the conical tower of Zumbabwe.

The painter, Herr A. Bayrle, makes some interesting remarks about the art of the carved figures among the Konso and Gato. It can be judged by no European or professional art standards, but must be considered as a definite stage in the evolution of seeing and thinking in art values. Criteria which would allow conclusions to be drawn about these strange art forms, are lacking. The religious medium of the mask is needed to express the correspondence of the being to his environment.

The course of this memorable Expedition was somewhat marred at one stage by the unfortunate incident described on pp. 455, 466. Even though it may be unavoidable, it is a pity to arouse the ire of natives, as apart from the ethical question involved, this makes future research in the same field very difficult, as the authors admit.

E. D. E.

The Earth Goddess. A Study of Native Farming on the West African Coast. By Howard Jones. London, 1936 (Royal Empire Society: Imperial Studies No. 12). 205 pp., 8 plates. Price 12s. 6d.

In making a review of the agriculture of the West Coast of Africa Mr. Jones has carefully avoided any comparison with twentieth century English agriculture: he has treated agriculture rather from a basic point of view, that is as a means of utilizing the green plant as a factory for the synthesis of carbohydrates, proteins, oils and other substances which are to be used ultimately for the satisfaction of the needs of man.

In making this truly scientific approach to the subject the social and the economic aspect have not been neglected, but, as the author points out, treated as

independent themes of a fugue which must be observed concurrently and with all their interactions in order that the organism may be understood as whole. After developing these themes Mr. Jones proceeds to a digression on 'Scale in Agriculture,' which he points out is not merely a question of the number of acres per farm, but of totally different types of intensive and extensive farming suited to local conditions. Under the title of 'Planter, Metayer and Small Grower,' he discusses these types in relation to their suitability to conditions in West Africa.

Much space is devoted to the important question of co-operation, the meaning of which the author explains and develops at great length in the case of Denmark. In an excellent chapter on 'Schools and the Farmer,' Mr. Jones shows a real understanding of agricultural education at this stage. He points out how the old dry-as-dust nature study—a study of form—has given way to the newer biological study of function: the living organism is now studied as a whole and in a way which leads to a real interest and insight into nature, as well as to an understanding of the underlying principles of agriculture and thus helps to solve the social problem as well as the technical. Mr. Jones rightly contends that all study-books contain too much, and that the sifting out of material must remain with the good teacher, who is rare. He accounts for this rarity not by the difficulty of the subject, but by its uncommonness and makes no mention of the continual call upon originality and ingenuity in adapting the biology syllabus to conditions of season and local environment. He in fact goes so far as to say that the syllabus can be designed by a number of first-class men selected as supervisors, but will not they be the first to realize that they cannot impose a ready-made syllabus on any individual teacher or set of conditions?

Mr. Jones does not pretend to have solved the problem, but he has made a real contribution towards it. His book is a good one, of anthropological interest and of special interest to those engaged in the administration of agricultural education in West Africa and elsewhere.

G. P. L. MILES.

Die Glidy-Ewe in Togo. Züge aus ihrem Gesellschaftsleben. von *Diedrich Westermann*. Berlin, 1935. xv + 332 pp. Price 15 Mk. (Mitt. d. Seminars für Orientalische Sprachen an d. Universität Berlin. Band zum Jahrgang XXXVIII.)

Students of social anthropology will welcome this fine portrayal of a West African culture. The Glidy-Ewe inhabit the extreme south-east corner of Togo, north of Anecho, on the other side of the lagoon. The natives give the name of Gê to the district of Glidy and Anecho, the West-Ewe call it Gënyi (Lower Gê) to distinguish it from Gêlzi (Upper Gê or Gã).

The dialect of Ewe spoken in Gënyi is called Gëgbe. The native texts which form the foundations of this book are chiefly in this language, but there are some in the Aglô dialect of the West Ewe. The Gëgbe texts were collected by Professor Westermann over a period of ten years, from B. Foli, an educated native, who is to be congratulated on having a remarkable knowledge of his own culture. Such a collection of native texts must be invaluable to students of the Ewe dialects. Professor Westermann's great experience has enabled him to cement the foundation texts firmly together with his own scientific interpretations, with occasional additional evidence from other sources, so that the culture is not altogether seen from the mental perspective of one individual.

The monograph is divided into the following chief

sections:—The Family; The Society; The State; Law and Justice. Under the 'Family' there are subsections dealing with Birth and earliest Childhood; Youth between Initiation and Marriage; Marriage and the Family; Death. Under the 'Society,' the kinship system and nomenclature are worked out in unusual detail. The description of the 'State' includes a valuable study of the Kingship. Particularly interesting are the Death Ceremonies of the King. Perhaps in this connexion one may be allowed to quote the song which is sung to the King's body when his coffin is being lowered into the grave:—

"From everlasting. Death is known to all
 "For at the end to all doth only Death remain!
 "Death! Open the door and let me in!
 "Death! Open the door and let me in!
 "From everlasting. Death is known to all

(Repeat)

"For at the end to all doth only Death remain!"
 And yet the Glidi-Ewe believe in reincarnation!

J. Spieth's work on 'Die Ewe-Stämme,' Berlin, 1906, may be consulted for information on the Ewe tribes in general. E. D. E.

Jabo Proverbs from Liberia. Maxims in the Life of a Native Tribe. By Georg Herzog with the assistance of Charles G. Blooah. *International Institute of African Languages and Cultures, London. Humphrey Milford. Price 10s. 6d.*

This is a thoroughly up-to-date scientific work. It should be studied by all interested in West African languages and native psychology. Folklorists will also find in it a mine of wealth. Four hundred and sixteen proverbs (often with accompanying parables) and seventy-four 'sayings' were collected from members of the Jabo tribe, township of Nimiah, Eastern Liberia. In the older literature this tribe has been included under the general and misleading name of Grebo, which has been used hitherto in an unscientifically elastic sense.

It is time that the various dialects spoken along the coast line of Liberia should be properly classified. There are, for example, at least twenty-five dialects of so-called Kru.

The proverbs and sayings are given in the Jabo language, the orthography and phonetic structure of which have been studied by Dr. Sapir, to whom the authors acknowledge their indebtedness. Jabo is a tone language spoken on four registers. The work involved in recording the native text with register marking and phonetic symbols must have been considerable.

The proverbs form part of a study which included also the music and famous drum-signalling of the natives.

Especially interesting are the proverbs recorded in songs of the Spirit-Society; and also those from the Drum, Horn and Greeting titles.

Anyone pretending to be a judge of African native mentality will receive some surprises when reading this book, hence its psychological value. The proverbs form 'a vital and potent element of the culture they interpret.'

The proverbs are grouped under the three main sections of Nature, Culture, and People; while the sayings appear under the four headings of: (1) those similar to proverbs; (2) definitions; (3) descriptive; (4) idiomatic.

To add an insignificant criticism:—it looks strange in

English to see the expression "a child this small" (Jabo: "child-not-is-large-thus"), p. 171, for "a child as small as this." E. D. E.

Baluba et Balubaïsés. By Verhulpen Edmond. *Anvers: Delare Les Editions de l'Avenir Belge, 1936. 534 pp., illustrations and maps. Price 150 fr.*

This is one of those monumental historico-ethnological monographs that require greater regional knowledge than the reviewer possesses to appreciate fully the labour and scholarship behind it. Baluba, in the wide sense, is a linguistic term which, when used ethnographically, can be applied to all the peoples who speak Luba dialects. In a more restricted sense, it can be applied to certain conquering elements and the states they founded. The author uses the term mainly in this political sense.

The Baluba are numerically and culturally one of the most important peoples in Africa, and the detailed historical account of them given in this book is to be welcomed by Africanists. Those who have not specialized in African ethnology will find it difficult.

Its main importance will be shown when some scholar makes a comparative study of Central African dynasties with the intention of discovering uniformities in the processes of conquest, political development, administration, and cultural assimilation that has taken place when there has been migration and expansion on a large scale. There is already a large body of historical material which might be used for such a study, e.g., on the Babemba, the Mangbetu, the Azande, etc.

The book is weak on the ethno-sociological side: though much of value is recorded on the more formal aspects of T is an excellent in Katang

The Real Abyssinia. By Colonel C. F. Rey, C.M.G. *London. 292 pp. Illustrated. Price 10s. 6d.*

Colonel Rey spent ten years in Abyssinia, when the decision of Menelik to open up his country to European ways was heading it to tragic catastrophes; for, as his successor said of his people in 1926, "throughout their history they have seldom met with foreigners who did not desire to possess themselves of Abyssinian territory and to destroy their independence." Here we have a graphic and intimate sketch of the country and its peoples, some impressions of Abyssinian travel in detail, a striking portrait of Haile Selassie and his regime, and discussions of the religious, historical and economic aspects of the Abyssinian problem. A book of this sort deserves a better index, more illustrations, and the date of publication. J. L. M.

Le Livre de la Brousse, Roman. By René Maran. *Paris: A. Michel, 1934. 8vo. 286 pp.*

Here is a vivid idyll of tropical African life which it would be a wholesome exercise for a beginner in ethnology to annotate. The French 'white gods' only appear on the outskirts of the story; the jungle animals, on the contrary are ever present, as in Kipling's India. Few aspects of native life are neglected, and the frequent scraps of folk-song illustrate aptly this 'expression of the emotions' so strictly repressed among ourselves. J. L. M.

The Mysore Tribes and Castes. By Diwan Bahadur L. K. A. Iyer. *Mysore Government Press, Bangalore, Vol. I. 502 pp.*

This is a disappointing book. The learned author was entrusted with the task of completing the Ethnographic Survey of Mysore, and has collected a

INDIA.

vast amount of invaluable material. Unfortunately this is buried beneath so much irrelevant matter that it is hard to sift it out. Long dissertations on Vedic religion and literature are surely unnecessary in a work on Mysore tribes. The volume opens with introductions by Dr. R. R. Marett and the late Sylvain Levi; the

latter is somewhat needlessly given in both French and English. There is a brilliant chapter on Racial History by von Eickstedt, who proposes to abandon the old terms Munda, Dravidian and Aryan, and to replace them by Weddid, Melanid and Indid. Having apparently accepted this, Diwan Bahadur Iyer goes on to use Aryan and Dravidian in the old way in the body of his work! Chapter II, contributed by Mr. F. J. Richards, deals in an authoritative manner with the Cultural Geography of Mysore. It is to be hoped that the

ucceeding volumes will be pruned of extraneous matter, and that the author will confine his dissertations more closely to his subject. This will make his work infinitely more useful to the student. The late Mr. E. B. Havell was excellent as an interpreter of Indian Art, but is scarcely to be taken seriously on the subject of the Aryan village; yet he is quoted at great length on pp. 417-9. It would be more convenient if an index to each volume were supplied.

H. G. RAWLINSON.

CORRESPONDENCE.

Myth and Saga. (Cf. MAN, 1936, 290.)

50 SIR.—Lord Raglan gives very good examples of how sagas develop when handled by men of imagination and genius. Let it be granted that he is right in supposing the story of the Burghers of Calais an invention of Froissart. It is easy to see how his mind worked in producing so moving a tale. King Edward was a valiant warrior, and such men are apt to be somewhat ferocious: it is the defect of their good quality. Queen Philippa was a virtuous woman, and virtuous women are merciful: it is one of their most amiable features. Then, what is more likely than that he was inclined to put conquered enemies to death and she interceded for them? The required enemies and the necessary conquest are to hand in the historical capture of Calais; and the rest follows.

So it is with the adventures of Diomedes in the Iliad. By the way, the episode is roughly one-half of one-twenty-fourth of the whole poem, an excellent illustration of the comparatively small share the gods take in the action. Diomedes was a famous hero; such men fear nothing that can be fought, not even gods, if it were not that to fight gods is impious. Suppose now that on some occasion he found himself in a position where to fight a god was allowable: he would unquestionably play the man even against so formidable a foe. If ever a hero had such a chance, it would be in the greatest of all wars, that of Troy. And so the episode follows, in all the glory of tenth-century epic.

Incidentally, I assume the early date of the Greek opinion of the historicity of the campaign, not because we know it to be true, but because it is found in Hesiod (*Works and Days*, 164-5), that is to say, about the eighth century B.C., even if we leave Homer out of the reckoning.

H. J. ROSE.

An Essay Prize for Egyptian Studies.

51 SIR.—A prize of £50 is offered for an essay in English on some archaeological or ethnographical (not mainly linguistic or literary) subject connected with Prehistoric or Pharaonic Egypt.

The essay should show original research. The words 'archaeological' and 'ethnographical' are to be interpreted in the widest sense. The subject may be selected by the candidate himself, and the essay should be illustrated by as much comparative matter as possible from other lands, whether ancient or modern. The utmost use should be made of photographs and drawings.

The prize will be awarded only if the work is of sufficiently high standard to warrant it.

Mr. K. de B. Codrington, Dr. Margaret A. Murray, and Mr. G. A. Wainwright have kindly consented to act as adjudicators.

The candidate may be of either sex and of any age. The essays should bear their title, and should be accompanied by a covering letter. Only the covering letter, *not the essay*, should be signed. Essays must be typed, and must be sent in before December 31, 1937

to Mr. J. H. Hay, Solicitor, 29 Bedford Square, London, W.C.1, who will give each essay a number and forward it to the adjudicators. Other correspondence should be addressed to me at 26 Elm Park Gardens, London, S.W.10. G. A. WAINWRIGHT.

A Lolo Manuscript in the Bodleian Library, Oxford.

52 SIR.—The MS. here described is in the Bodleian Library, Oxford, registered as *MS. Asiat. Misc. b. 1*. According to the notes attached to the MS. it was obtained from the Lolos by Lieutenant Hugh C. Somerville, R.N., Commander of H.M.S. *Woodcock*, which visited Ping-shan Hsien, Szechuan, on the 1st of July, 1901. "Ping-shan is a mean little town, its chief attraction is that it is on the threshold of Lolo-dom. The Lolos are a wild independent tribe of hill-folk: there are ten or a dozen of them kept here in the Yaman as hostages—I saw them this morning; they really are not so much unlike Chinese in their appearance, except that in place of a pig-tail they wear a horn. In spite of their rather unfortunate position they seemed a most merry light-hearted lot. . . . The Black boned' were far too high and mighty but the 'White boned' were less scrupulous and so they danced in pairs, only two at a time; it was a mighty dull performance, I thought. The first one of them began a series of mournful grunts and wagged his body to make his long cape wave about, then he turned slowly round and stopped grunting, and the other went through the same performance, it was such a tame affair that I got one of the bluejackets to come and play the concertina to them to buck them up, but it was no use, and we couldn't get anything better out of them. . . ."

"We got a manuscript from them which purports to be in five separate books, though I only got two of them as my share and they are supposed to be complete—I expect they are prayers really."

Moreover from a letter attached thereto, I learned that the MS. was given to the Bodleian Library on November, 1902, through Herbert W. Greene, Esq., Fellow of Magdalen College, Oxford, to Mr. Nicholson, then Bodley's Librarian. Since then (I was informed) it has never been studied.

The MS. consists of 25 full pages, apparently of two separate books, one of 11 pages and the other of 14 pages. All the pages are of uniform size, 41.5 cm. in width and 19 cm. in height. The paper used is the common Chinese writing paper known as 'bamboo paper,' in a condition which shows that the MS. is not very old. The ink is of two kinds, China black and cinnamon red. Words are produced by a hard bamboo or wood brush, not by the ordinary Chinese fur pen. The technique of the writing is of medium grade, but shows a uniform style. Like many other Lolo MSS. it is read from top to bottom and from left to right. Paragraphs are separated by toothed marks, and the title of a book is surrounded by a border. Most of the pages are written in one kind of ink, either black or red,

but in some pages both are used. For what motive have two kinds of ink been used in one work? It is evident that this MS. belongs to the Taliangshan school of Lolo writing, not like the characters from Yunnan printed in Père Vial's *Dictionnaire Français-Lolo*. The content of the whole MS. is not known; possibly it is a Lolo

work of creation-history, prayers or magic-books. I have asked Prof. Y. Wen, a distinguished philologist of the Lolo language, of the National University of Tsingtao, to translate it, together with my other two Lolo MSS., into an intelligible tongue.

Shanghai.

CHUNGSHEE H. LIU.



FIG. 1.—STONE FIGURE FROM BOLIVIA.



FIG. 2.—FEMALE CLAY FIGURE FROM BOLIVIA.

Two Human Figures from South America.

53 SIR,—Two human figures, which are said to come from Bolivia, are illustrated in Figs. 1 and 2.

The male figure (Fig. 1)—head and shoulders—which measures 10 inches in height, is made of a red volcanic stone; the female figure (Fig. 2), which is 6½ inches high above the plinth, is made apparently of a kind of clay, which has been covered completely with some black pigment.

The heavy brows, the long nose and ears and the square chin are reminiscent of the figures from Easter Island, but the man from whom they were bought in

Valparaiso, when it was suggested to him that they should be attributed to Easter Island, confidently asserted that they came from Bolivia.

Nobody in Chili ought to be in doubt as to the work of Easter Island, for there is quite a considerable trade with that island in modern reproductions of old carvings. On the quayside the local merchants, selling rugs and ponchos, include in their stock modern ancestral figures in wood in imitation of old models. There are no figures from Bolivia in the British Museum, with which comparison may be made, and it will be interesting if any readers of MAN can throw any light on the subject.

ARTHUR G. HEMMING.



Grafton Elliot Smith

SIR GRAFTON ELLIOT SMITH, M.D., F.R.S., Litt.D., D.Sc., F.R.C.P. 1871-1937.

Photograph by F. W. Schmidt, The Studio, 6 St. Ann's Square, Manchester.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 54-70

MARCH, 1937

Plate C. Sir GRAFTON ELLIOT SMITH, M.D., F.R.S., Litt.D., D.Sc., F.R.C.P. 1871-1937.

An obituary notice is printed below. MAN, 1937, 59.

ORIGINAL ARTICLES.

Religion.

Hocart.

INITIATION AND HEALING. *By Professor A. M. Hocart, Cairo*

54 I know a young lady who was not baptized as a baby. She kept ailing, and so she was baptized. She has thriven ever since.

Here is a case in which an initiation ceremony is used for healing. The way it comes about is this: the ritual confers weal; so does initiation, since it is a ritual, but, for some reason, growing scepticism, slackness, etc., it may be omitted, and no disaster happens: so men get bolder and bolder to omit it; but, if there is illness or other calamity, conscience pricks; the people look round for an omitted ritual, and proceed to repair the omission. As omission grows more and more frequent, the ritual becomes more and more restricted to pure healing: it becomes medicine.

This explains how it is that ceremony similar to the old Maya baptism "is still in use among the modern Mayas of British Honduras to cure sickness" (Th. Gann and J. E. Thompson, *History of the Maya*, London, 1931, 139). It is a pity we have not got the details to compare point by point, but it is clear that the missionaries have succeeded in weakening the old initiation, so that it is no longer a matter of course; yet the Mayas still retain enough faith in it to fly to it in cases of illness.

I have sought to explain in this way the Eddystonean cure for woman-shyness (*MAN*, 1935, 23).

This may also explain why the Fijians carry out as a cure much the same operation as the Australian Blacks use by way of initiation. As everyone knows, many aborigines of Australia have an initiation in two parts, the first including circumcision, the second subincision. The Fijians have part i. only: but it has been said that the hill-men of Viti-Levu (who are strongly Australoid) make use of subincision as a cure and call it *dhoka losi*. That is not quite true to the letter, as far as my information from Kandavu goes. In that island, if a man is suffering from sprain, pain in the back, or serious illness, the leech thrusts a sharp stick up the urethra till the point appears above the scrotum. At this point he makes an incision, draws the point backwards and forwards, and then pulls it out. He washes the wound with an infusion, of which the knowledge is hereditary. The patient lies still for 8 days, which is twice the usual ritual quiescence in Fiji. This operation is thus evidently an atrophied ritual. It is not exactly subincision as practised in Australia, but there can be little doubt it is a variation of the same operation: either it is an imperfect subincision, or else subincision is an extended *dhoka losi*. It would seem then that the Fijians have dropped part ii. of the initiation, but revive it in special cases.

Blood-letting is probably another illustration of the same process. We know that it was widely practised in ritual, particularly in initiation ceremonies, long before it became limited in our country to the healing of specific complaints. We have done the same as the Fijians, except that we do not draw the blood from the penis.

We have described one way in which initiation may be narrowed down to medical treatment:

revival in a scare. There is another way. A man tries all the rites he has been brought up to believe in, finds no relief, so in despair he resorts to the holder of some foreign ritual, as we take refuge in foreign specialists. That is how the Fijian nobleman, Vuetasau, was converted to Christianity, and through him the whole of the island of Lakemba: he and his people were baptized, because his own gods had failed to cure his daughter, while the Christian god succeeded. That accounts for a great many conversions.

Prof. M. A. Canney provides me with a case in which a Hebrew on receiving Christian baptism is healed of his disease.¹ Naaman was cured by a Hebrew baptism, when the rites of his own country failed.

The history of circumcision in our country illustrates yet a third process. Circumcision, as we all know, was originally part of a system called puberty initiation. It still is, in all but a few cases. It is only one episode out of many that go to make up puberty initiation. It is, however, the most sensational episode for those who practise nothing like it. Those to whom it is a novelty are so fascinated by that one rite that they overlook the rest. They want to explain what seems so strange, and they proceed to do so in the manner in which theorists always begin: that is, they look for some reason such as appears 'rational' to them, in other words one which agrees with the philosophy of their own time and class. The only purpose the philosophers of the eighteenth century could find that was sensible in their eyes was that of keeping the dirt out. So circumcision was ascribed to some wise legislator who devised it as a method of improving the health of his people. Any connected rites and myths, if noticed at all, were explained away as cunning devices to get the reform adopted by a people unable to appreciate health, but eager for hokus-pokus. This interpretation of the custom grew in favour as the craze for hygiene grew. As the result of that craze many Christians have adopted circumcision alone without the accompaniments which were originally as indispensable as the operation itself. As the purpose is for them purely

hygienic, all the other rites have become irrelevant as not contributing to cleanliness.

Here then we have a clear case of ritual becoming a surgical operation, that is, of a complete initiation rite, vaguely aiming at manliness, being whittled down to one episode applied definitely and exclusively to the pursuit of cleanliness. Ritual has been pared down to surgical technique.

The process by which this has come about is not the same as in the first case. There a disused ritual was revived under the influence of fear. Here a people who did not practise the operation have lifted it out of its context, because the context did not interest them, did not fit in with their system of thought. The operation alone interested them, because it seemed to fall in with a fad of their own time.

Another example of this process is the earth-lodge built by the Arikaras of North America to conform with ritual requirements, and adopted by the Omahas for purely constructive reasons (Fletcher and La Flesche, *The Omaha Tribe*, 75; R. Linton, *Origin of the Plains Earth-Lodge*, Amer. Anthropologist, N.S. 26, p. 247).

When a ritual episode is thus taken out of its setting and provided with a new interpretation and a new use, it becomes, in the eyes of the adapters, a 'rational' act, as opposed to magic. That is natural, since they give it a new use because they believe in that use and not in the old one, and what they believe in they think rational. If the new use consists in narrowing down from general weal to the cure of a particular disease it is called 'rational medicine.'

These terms are unfortunate because they proceed from a false psychology which divides the mind into two compartments, one rational, the other magical. This school of thought imagines a time when the rational compartment almost filled man's mind. Then the magical compartment grew and grew, extending to all man's life. 'Religion got mixed with all his 'doings,' to speak the language of that school. Then, of course, we moderns have come along and pushed back the limits of the magical, till it has completely disappeared, and our minds harbour nothing but the rational.

If, instead of philosophizing, we trace out actual cases from the beginning to the end, what we find at one end is a vague general quest of life.

¹ *The Magico-religious Significance of Sand*, Journ., Manchester Egyptian and Oriental Soc., No. XIX, 41, note 3, referring to Georgius Cedrenus, *Historiarum Compendium*, I 440 (Migne, tom. 121, 1864).

a quest ill-adapted to secure any particular component of weal, but generally helpful in life; at the other end appear highly specialized techniques concentrating on one specific objective, the slaying of enemies, the catching of fish, or even of one kind of fish, the cure of belly-ache, or whatever accessory of welfare it may be. As the result of this specialization these techniques *may* become highly efficient for their own limited purpose, but they are useless for any other. The generalized state ritual of Fiji is a great social tonic: it is useless for blood congestion. Blood-letting has no social value, but it may conceivably relieve congestion.

Our theories of culture, however, are still so near to philosophy, so little based on observation, that the hard-and-fast division into rational and magical still pervades them all. It is the accepted doctrine that a 'rational' custom must have a rational origin. Recently Dr. Hugo Th. Horwitz in an article, one of the best on technology of recent times (*Die Drehbewegung*, *Anthropos*, 1933, p. 721ff), asserts (p. 729) that a technical invention cannot come into being through mythologico-ritual concepts. It is strange how such statements can continue to be made with the example of circumcision under our very noses.

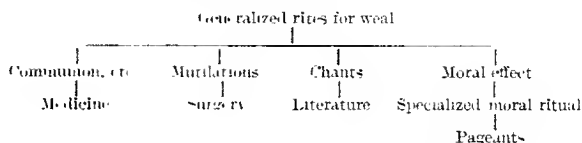
Technology.

ON THE CAUSES OF GREY AND BLACK COLORATION IN PREHISTORIC POTTERY. *By* Professor V. Gordon Childe, F.S.A., University of Edinburgh.

55 The following experiments, carried out with the assistance of my colleague Prof. Barger, seem to have such a bearing on the cause of the black or grey colour of prehistoric pottery that it may be worth while to record the results so far obtained. Experiments were undertaken primarily to determine whether the highly burnished light grey ware characteristic of 'neolithic' sites on Malta should be assigned to the 'reduced' or to the 'carboniferous' group.

A. To this end sherds of (1) Grey Minyan ware (as an example of the 'reduced' group), (2) Maltese neolithic, and (3) black Slovakian Early Bronze Age ware (supposed to represent a typical 'carboniferous' fabric) were heated for ten minutes to a dull red heat, first in a current of oxygen, and then in a current of coal-gas (*cf.* E below). By oxidization all three sherds were turned to a light reddish brown as was to be expected if the clay contained iron oxides. After heating in the 'reducing' atmosphere all three sherds were

The idea of 'rational' and 'magical' is purely subjective. It is therefore unknown to the biologist. What he does know is generalization and specialization, purely objective concepts. Specialization leads to greater efficiency at the expense of breadth and adaptability. In an age which worships efficiency, therefore, specialized forms appear rational. They may appear irrational in the next age. The student of culture has not to approve or condemn, but to trace development, which can provisionally be sketched somewhat as follows:—



Since the above was written I have come across the following illustration of the manner in which a sacrament can be revived to heal. A Shawnee says:—"We hadn't gone by the rules in naming Arthur the first time; we just sent for two old women who stayed overnight and gave Arthur his name. . . . But when Arthur got sick we make up our minds that we'd do it better and so we had him given a new name at a peyote meeting." C. F. and E. W. Voegelin, *Shawnee Name Groups*, *Amer. Anthr.*, 1935, p. 626.

Childe.

again blackened. The Minyan and Maltese pottery turned an even darker grey than the original specimens showed, while the Danubian Bronze Age sherd resumed precisely its original colour both on the surface and in the core so that the 'reduced' fragment could not be distinguished from the rest of the larger sherd to which it had belonged.

B. As a control-experiment, another Maltese sherd was oxidized but this time the oxygen, first freed from all carbon dioxide by passing over quick lime and through a solution of potassium hydrate, was allowed to bubble through baryta water after passing over the heated pottery. A precipitate of barium carbonate showed that in the oxidization of the pottery carbon dioxide was in fact given off. Hence the Maltese neolithic ware may comprise free carbon. The carbon dioxide emitted may, however, have been due to the breaking up by heat of calcium carbonate which occurs as an impurity in nearly all clays.

C. A piece of the black rim of an Egyptian Predynastic 'Black-topped' vase was heated in oxygen under similar conditions. It yielded a heavier precipitate in the baryta water.

The 'black-topped' rim had now assumed the same deep red hue as the rest of the vase. This piece was then reheated in a current of coal-gas. It returned to a deep black shade only just distinguishable from the rest of the jet-black rim from which it had been taken.

D. As further control a piece of polished black Anatolian ware from Thermi I was oxidized, and reduced, as in experiment A. It turned reddish brown on heating in oxygen, but reverted to a black hue after heating in coal-gas. The surface thus obtained was not such a pure jet-black as the original, but there was no detectable difference in the blackness of the core between the reduced fragment and the test sample.

E. Prof. J. L. Myres suggested that the blackening after heating in coal-gas might be due to a decomposition of the hydrocarbons. As a check, a piece of Maltese neolithic, previously oxidized, was heated as in experiment A, but in a stream of pure hydrogen instead of coal-gas. The sherd was turned a deep grey colour indistinguishable from that obtained with coal-gas in the original experiment.

In the foregoing experiments all free carbon had been burned out in a current of oxygen before reduction in coal-gas or hydrogen was begun—this at least was established by tests with baryta water as in C which were negative with a fully oxidized sherd. Yet by reduction in a gas, perfectly free from soot, or dark carbon compounds, the samples assumed a darker grey hue than the originals in Maltese and Minyan wares, the original shade of black in the case of Danubian Early Bronze Age ware, and an only slightly poorer black in the case of Egyptian Predynastic black-topped ware, and Anatolian black-polished ware. It is, therefore, clear that good greys and blacks can be obtained from ferruginous clays by mere reduction. How far the colour of an individual specimen may be due to free carbon or to ferroso-ferric oxide cannot be

determined by inspection, but only by quantitative analyses. Maltese neolithic pottery like Anatolian black ware and Egyptian black-topped may contain free carbon. I would, however, submit that attribution of the black or grey colour exclusively to this element is not justified experimentally.

On the other hand I would suggest that there is more truth in Petrie's account of the coloration of black-topped ware than Lucas¹ is prepared to admit. On the strength of ethnographic parallels a deliberate introduction of carbon by smoking or rubbing with dung, etc., may be admitted as likely in the case of the highly burnished jet black fabrics. In most grey or dark-faced wares, however, a sharp contrast between 'carboniferous' and 'reduced' fabrics should be treated with reserve. In any pot-fabric containing free carbon the iron oxides, if any are present, will presumably be of the 'reduced' form and so contribute to the dark colour. A 'reducing' atmosphere can be maintained without any elaborate kiln: if the vessels were fired in a pit the smouldering ashes from the fire would give off enough carbon monoxide to keep the atmosphere 'reducing' till the pots were cool. To get a really deep black by 'reduction' apparently needs a higher temperature than the neolithic Maltese, or the Middle-Helladic Greeks, could apply to a whole pot. But actual contact with glowing charcoals, such as Petrie postulates in the production of the 'black top,' would produce local temperatures comparable to those obtained in my experiment.

It may be noted that on some Maltese sherds one can see in section a slightly reddish core: this is, I presume, the inverse of the common phenomenon, in which the core is black and the surfaces red through the incomplete oxidization of the interior. In Malta the reduction was similarly incomplete, a phenomenon recorded by Lucas on modern Egyptian pottery. It confirms the importance of the reduction in the coloration of the Maltese neolithic ware.

¹ *J.R.A.I.*, lix (1929), pp. 113-130.

Burma.

LAND TENURE IN THE CENTRAL CHIN HILLS OF BURMA. By H. N. C. Stevenson. Illustrated.

56 The two facts of greatest importance in the study of tenure in this district are that perceptible change is occurring, the tendency being towards increased individualism, and that the absence of a definite policy in respect of new settlements in unoccupied lands has given rise to

an avoidable confusion in the minds of the natives.

The main problems confronting the administration are, therefore, the formulation of a policy regarding individualism in land tenure, and the application of this policy to changes in existing tenure and composition of new systems when squatters occupy lands declared to be the property of the State.

Land is used primarily for the cultivation of grain crops; grazing is a minor consideration as herds are very small, and these are turned loose on to fallow lands. The whole of the lands of the village are divided into two or more sections or fields called *lopil*, each of which is cultivated in turn. Plots in these *lopil* are demarcated by lines of stones.

To illustrate changes in tenure, hypothetical reconstructions are unnecessary. In the Zahau Tribal area, which is the least in contact with modernizing influences, and which suffered the least in recent tribal wars, there exists a form of tenure which is admitted by the Khuangli, Laizo, and other related tribes to be the original pattern of their own systems. All these tribes had a hereditary political hierarchy in pre-annexation days, and will be referred to in this article as the autocratic group.

Among the Zahau the right of allotment of land between villagers is vested in the Headman. Sale and renting are forbidden, but individuals have hereditary rights to cultivate certain plots, the number being strictly limited to one plot per man in each field (*lopil*). These rights were derived from the original squatters' claims to continue cultivation of the plots cleared by them of virgin jungle.

Persons not possessing hereditary cultivation rights, and also persons whose hereditary plots do not provide sufficient sustenance for a large family, may cultivate for one rotation period any vacant plot they desire, on a nominal payment to the Headman of one pot of beer (*zu*) as 'talking price.' This cannot be regarded as rent as it is only about 1/200th of the total value of the yield. All residents of the village have a potential right of cultivation, as the Headman must provide for everyone.

As regards hereditary titles to cultivate, where a man already in possession of titles over the full quota, that is, one plot in each field, receives a few more by inheritance from a relative, he can

exchange, without increasing the number of titles held, any less desirable plots of his own for those of his deceased relative, up to the limit of his quota, and hand over the balance to the Headman, to be allotted as need arises. If any patrilineally related heads of individual families so desire, they have an exactly similar right of selection in order of precedence in consanguinity.

One of the obligations which fell upon holders of cultivation titles on the best plots was that of assistance in kind, to a much greater degree than the ordinary villager, when defeat in war or other calamity rendered payment of communal indemnity necessary. This obligation will be referred to later.

Among the Tashon, Zanniat and others (whom for the purposes of this article I will refer to as the democratic group, as prior to annexation they were ruled by a council of elders elected to represent patrilineal extended families) a slightly different system existed, which can be found to-day in the village of Lotsawm, side by side with two other forms of tenure which resulted from administrative action.

In this system limited right of disposal is vested in the individual, since he can gift his land titles to males of his own patrilineal extended family. He may also inherit cultivation titles over an unlimited number of plots, but these are in effect priority titles, as he may not refuse permission to cultivate to any person wanting a plot which he himself is not using. Sale and renting are forbidden as among the Zahau.

In action the two systems described above have a similar effect—they enable the old squatter families to retain titles to cultivation of plots which their ancestors cleared of virgin forest, and prevent a person making a profit out of his land rights, while ensuring a sufficiency for his needs. This makes for stability, as each titleholder feels a definite connexion with the land. In all villages it will be found that cultivation of the least fertile ridges is free from restriction: these areas constitute the 'poor man's land' which can be worked on payment of a pot of *zu* to the Headman or Council as the case may be.

Taking these two systems as standards from which change can be measured, I give below the main reasons for change, with specific instances to illustrate each.

(i) *Internecine warfare in pre-annexation days.*—As an example of the effect of a defeat in war

upon land tenure, the history of the first suffered by the Khuangli tribe is very clear. This tribe, which included vassal villages of Ngawn, was called upon to pay a heavy indemnity by the then paramount Tashon as a punishment for an abortive attack on the Zahau. The fine was exacted, as customary at the time, in *mithan* (*Bos frontalis*), gongs, guns, and other valuable articles.

As the reciprocal social obligation system

holding one of the great ceremonial feasts, or by supplying wives for several sons, or by illness. In such cases of inability to pay, others who volunteered to shoulder the burden were rewarded by the Headman with an exchange of plots, the man who paid up taking the plots of the man who could not do so, and vice versa. At a later date, payment of further indemnities so impoverished the Khuangli that they had not sufficient material wealth to pay the 'bride-price' for their wives,



FIG. 1. A NGAWN HUNTER.

Hunting rights are an inextricable part of the land tenure system.



FIG. 2. THE HEADMAN OF SATAWM.

A good type of Hualngo, a clan among whom beards are very common. One of his most important duties is the distribution of unoccupied plots.

demanding that holders of cultivation titles over the best plots should put up the major portion of such untoward payments—it being held that possession of the best plots was synonymous with material plenty—these men were ordered to pay their share.

Material riches, however, were not always co-existent with rights over the best land, the wealth normal to a person having productive plots might have been temporarily dispersed by

and so cultivation rights became transferable in this connexion. All this occurred prior to annexation.

Use of land titles as 'bride-price' units loosened the old strict rules governing tenure, and a new conception of land was evolved: it was no longer a means to the end of hunger-satisfaction, it was negotiable property.

People began to realize that it was against their interests to allow others to cultivate their vacant

plots, which, swelled in numbers by unorthodox additions through 'bride-price,' for which there was no special ruling under customary law, exceeded in many cases the ancestral quota of one plot per field. The practice of renting these plots became general, and now the only remnant of the old régime is the prohibition of sale by an emigrant, whose plots revert to the Headman for disposal with the poor lands on the high ridges. Right of cultivation has been metamorphosed into right of disposal.

(ii) *Migration into lands rendered tenable by the Pax Britannica.*—It being no longer necessary for self-protection to live in large villages and cultivate only those fields which admitted of easy

rocal obligation system. They urged that these payments gained them the right of disposal by sale on migration. They lost their case, but in the meantime the Headman counter-claimed the right to seize the lands of emigrants and dispose of them as his own private property instead of adding them to the public lands, with the result that all the holders of cultivation titles in the village (who had hitherto remained neutral) became so nervous of their own vested interests that they joined the emigrant *bloc* in an attempt to get the tenure classified and recorded as private peasant ownership. This case clearly illustrates also the difficulty of settling disputes about the land tenure as a unit divorced from the



FIG. 3. POT-MAKING.

The husband in the background is preparing to cut up a plantain trunk for pig-food. Titles to pottng clay and wild produce such as plantains are held on residential qualifications.



FIG. 4. MILLET FOR PREPARATION OF BEER DRYING ON MATS.

Note the thatched house. All residents of villages have a right to collect thatch growing on fallow lands.

defence, pacification of the country started a rush for the hitherto untenable lands on the borders of the Lushai Hills, the Tidim Sub-division, and the Plains of Burma. The majority of the migrants were actuated by motives of land shortage or high rents in the mother village, but a large minority had other and less creditable motives.

As an example I give the Khuangli Ngawn, who were the first to migrate in large numbers. These emigrants, seeing an opportunity of capitalizing their land titles in the parent village, claimed that the *mithan*, guns, gongs, etc., which their fathers had subscribed in the past towards communal indemnities were, in fact, purchase prices paid to the Headman for the land they received, and not shares payable under a recip-

other multiple institutions of society, and the necessity of a complete knowledge of institutionalized obligations within the society as a prerequisite of evaluation of land rights.

The immigrants into new villages were not restricted as to tribe, so Ngawn have migrated into the old Zanniat territory, Hualngo into Zahau lands. Khualshim into Tashon lands, and so on. In the case of migrations into the Zahau area, adherence to the Zahau system of tenure has been made a condition of settlement and uniformity exists, but in other tribal areas where the chiefs are appointees of Government with no land rights outside the boundaries of their own village, considerable confusion has occurred through each tribal group trying either to transplant its own ancestral tenure, or to invent some

other more suited to what it considers its needs of the moment. These experimental tenures tend to be extremely individualistic, the squatters aiming at establishing a right to disposal of the lands they have cleared, so that if ever they wish to move again, they can sell out.

(iii) *Delineation of village boundaries after annexation.*—Of the causes of change in tenure, the record of boundaries made soon after annexation is not the least active. At the time, our knowledge of the people and their languages and customs was at a minimum, the country in a state of ferment with a number of the real headmen in hiding, and most of the interpreters plainmen of doubtful character whose chequered careers had led them into the hills as a refuge. Village boundaries had to be demarcated for purposes of administration, making of roads, etc., and in the circumstances the most accomplished liars often came off best in the negotiations. An excellent example can be found in the village of Lotsawm—here the hatred of the then paramount Tashon Council resulted in a large part of the village lands being maliciously included in the boundaries of Tsawngkhua, a neighbouring village of the same tribe.

Subsequent growth of population having caused an acute land shortage, the unfortunate villagers of Lotsawm had to buy back from Tsawngkhua some of their own ancestral lands. This area, purchased by the community as a whole through its council, was reserved as communal, right to permit cultivation being vested in the council. At a still later date further expansion necessitated another land hunt, and as none was obtainable from Tsawngkhua, Lotsawm had to turn to Hmunli, where a tenure was in operation in which right of disposal was vested in the individual. The purchases in this case were very different from the first, as individual family units had to buy isolated plots.

Thus at the moment there are three forms of tenure co-existing at Lotsawm, *i.e.*, that in which absolute right of disposal is vested in the individual, that in which sale is prohibited but restricted rights of gift and inheritance are vested in the individual, and that in which all disposal rights are held by the community.

Even where individual rights of disposal of land exist there is considerable variation in degree. In Tashon and a few other villages in the immediate vicinity, outright sale is permitted

within the tribe, while in the Laizo and Khuangli villages sale is usually restricted to persons resident in the same village, though exceptions are beginning to occur.

I have now come to the problem of whether or not this individualistic tendency in change is to be encouraged.

I think I have shown the salient advantages of the old systems—the provision of adequate, but not excessive land and the prevention of exploitation of rights by sale or renting; but there are other points worthy of consideration which do not appear so clearly.

The Zahan tenure, as outlined, is a major source of the power of the Chief and Headman, and as such consolidates the political structure of the tribe: as the right of disposal emphasizes the existence of the headman, so the right of inheritance emphasizes the family bond. While the prohibition of sale precludes also the squandering of the sources of food, the prevention of rental welds the social structure by accentuating the obligations of the *haves* towards the *have-nots*. The Zanniat example varies only in that the onus of distribution falls, in this democratic group, upon the head of the extended or individual family, in the absence of a headman.

It can justly be said that the Zahan system leaves it open to the headman to abuse his powers by favouritism in the granting of fields, but the same applies to all forms of reward by which a headman can induce support, and the remedy seems to lie in supervision.

Where so clear-cut a system exists, illegality would result in immediate litigation, and in this lies the safeguard. That the individualistic tenures involve far more subtle abuses has been shown by the fact that during lean years, when cash for payment of taxes has been almost impossible to find, unscrupulous headmen have been known to force their people to surrender to them plots worth many times the value of the tax, under threat of action on behalf of Government for default. Such transactions, bearing as they do the outward semblance of legal purchases at an opportune moment, often go undetected.

Local experience proves that, in all villages where individual right of sale exists, the bulk of the land is in the hands of a few rich men, with resultant disaffection among the landless rent-paying majority.

From the evidence it appears that the preven-

tion of the spread of individualism would be the best policy, as it would retain the types of tenure which strengthen the social bonds and prevent migration from old villages becoming a form of profit-making on land investments.

As tribal wars are now impossible, major communal crises involving the payment of heavy indemnity are no longer likely to disturb by their occurrence the present distributions of lands, and an established monetary system renders it possible to spread the payment of small fines in easy gradation throughout the community.

The right of the headman in Zahau tenure to redistribute *occupied* lands has therefore become redundant, and remains only as a source of abuse.

With regard to the regulation of tenure in new villages founded in lands vacant at the time of the annexation, it appears that a system suitable to existing conditions would restrict the right of disposal of land by the headman to *unoccupied* fields, while retaining all the other regulations of

disposal and cultivation in the Zahau tenure. All new villages are bound, under existing orders, to have a headman duly appointed by Government, but the office is in danger of degenerating into a mere echo of the voice of higher authority.

Imposition of a tenure as outlined would foster the community spirit and add to the prestige of the artificial political hierarchy by diffusing its authority through this important aspect of the social organization.

While it appears that a changing of economic and social values through education and mission activities will eventually modify Chin life in almost every aspect, needless acceleration of the process will only lead to the disintegration of society. A check on individualism in land tenure will preserve those elements which bind people to the village of their birth, and by assuring the food supply of all, remove from among the factors inducing change that most potent of them all—hunger.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Death and Mourning Ceremonies at Normanby Island. *Summary of a communication by Dr. Geza Róheim. 9 February, 1937.*

Death felt as a loss by the survivors. Mourning ceremonies are ritualized representations of this sentiment. Ritual wailing. Two analyzed cases. The loss is compensated by introjection. Eating the dead. Monkeys eating their dead children. Eating the corpse as an oral compensation for the loss among primitive tribes. The mother's nipple as the 'oldest of the gods,' the prototype of 'good objects.' Combination of delayed burial and endocannibalism.

The death of Raraworu. An inquest held at the grave. Witches, sorcerers or the rara as cause of the death. The rara and parricide. Totemism, name taboo and rara. A case of death by rara. Burial alive and the dreams of Ramoramo.

Bwabware of Tarabatea at Liasurn (Kebujada) (Nejosi Bagailej Sine Gewahana).

Bwabware at Mwadauna or Boasididi. A purchase bwabware matrilinear and patrilinear inheritance. The songs. Dream of Lewajani. Dream of Ne Duro.

Bwabware at Kenolia. 18th of July.

Another bwabware at Kenolia. Further details of the mourning; the farewell meal, 'the madness,' the ceremonial silence. Sitting in the enclosure end of the first period and the ceremony of tying the mourning string or cooking.

Second bwabware at Mwadauna. Date determined by the ways of a pig.

Bwabware at Tauihaua for Diaikis son Dibere. Adopted relations function like real relations. The 'bubura' and the breaking of the enclosure. A

small ceremony called 'sticking the gwara' introduces the real gwara ritual. The words for the food given by the married relations to the clan (bwabware) and for the return present from the clan (galabeda): both mean *taboo*. The mourners are ugly people; when the mourning is finished they are *healed*. Dreams of Iuois and the father-complex.

Bwabware of Lelegubesi at Kenolia. A case of double mourning; the father as a 'married relation.' The psychology of the bwabware ritual; the real relations exempt from mourning, because they are 'one body.' The mourner is a person who is suffering a punishment. A married relation is an enemy, in the case of a death a culprit. The bwabware as a conditional curse shows that the members of the *susu* are also potentially hostile. Practice does not conform to theory.

The gute ceremony. A sociologically different type of mourning. The gute and platform burial. Eating the belly of the deceased in a pudding. They emerge from their mourning as 'baraus' who kill somebody in revenge for the death. The platform; the gute seated on the platform represent the ghosts. The gute people and love-magic. The gute people are 'paid' by the noni-asa for their 'barau' activity. The gute on the bridge or platform are the ghosts, thus the ghost is regarded as revenging its own death. The gute type of mourning in which own clansmen participate is a special honour accorded to people of importance. Special language used by the gute people. They are charged with barau magic and thus mutually dangerous for each other. Variations of the gute ritual: Nadinadia, Mwateba, Guj. Food sacrificed

to the spirits. The Lomitawa duguma ceremony as a subvariant of the gute. Inofficial or real mourning beside the official ceremony. Vicarious rôle of gute and mother's brother. 'Uwana' or madness closely connected with matrilinear susu. Dancing as part of the mourning ceremony; the rausa dou. Symbolism of the songs; the dead woman, as a beauty carried away by Death, or as cohabitating with Death and refusing other men. The power of death symbolized by the *sigaha* (love magic). Another gute at Nadinadia. Women as gute; this is according to Siga-siga custom. Giving food to the spirits of the dead (p. 123). The gute people as 'widowers'; they will force people to give them their present as they will not stop mourning till they receive it. This is quite different from the bwabware type of mourning where food is provided by the mourners for those who release them from their obligation. Individual differences in the mourning ritual; a gute with a galabeda. The difference between bwabware and gute is explained by the theory that in the gute ceremony the own-relations are under the suspicion of being responsible for the death.

The *duguma* ceremony of Duau proper. The mourners are chiefly women. A remote variant of the gute type of ritual. The mourners as ravens. Chewing as compensation for a loss. Dream of Doketa's wife.

The *gwararasa* 'breaking of the gwara' at Nadinadia. The songs before the ceremony. To suffer a loss means to be motherless. Kasabwaibwaileta as typifying a rejected suitor. The woman in mourning is taboo like a pregnant woman. An allusion to Gimwagimwareja, the chief mourner, as a sogara (prostitute). End of mourning symbolized by the happy end of a love affair. A man who has no mother and no sister is unprotected against evil magic and aggression. Hostilities at the feast. In old times a man was killed at the end of the mourning period, now a turtle or boar. Separation from the dead means separation from the mother. The dead as equated with a lost lime pot. Death and 'une': the dead are the departed, those who have sailed. The festival of gwara rasa or the broken taboo. Distribution of the food. Presents help to overcome shame. Proceedings at the feast. Various scenes. The nipple and the 'jaguma.' Specific features of the food division. Importance of the 'return' element. Changing places. The food division and the strangers. The basa or farewell meal. Individual differences. Seguraguras dream, the feast and the mother-child situation. Love and food. Gardens made in honour of dead mothers. Dream of Gimwagimwareja. Mourning and weaning, or primal object loss and body destruction phantasies. Mourning in Dobu. The Trobriands. A parallel to the gute, introjection of the dead. Parallel and opposite features. Goodenough customs: the voice of a mourner is like the voice of a little child. Analogies to Normanby Island customs at Mailu. Wagawaga, Tubetube and Bartle Bay. Mourning and weaning. The mourners have suffered a loss and the ontogenetic prototype of this situation is

the separation of the mother from the child. The danger of separation from the primal love object. Companionship and food. Eating the corpse and introjection. The rights of an orphan. The mourner is pregnant with the dead. Mythical origin of yams as 'children' of a mourning woman. Melancholia and mourning. Sadness and anger. Destructive impulses as thwarted love. Eros and Thanatos both involved in oral incorporation. Food taboo as repressed cannibalism. A clinical ease to explain the specific features of Normanby Island mourning customs. Compensation to the maternal clan. In-law relations accused. The dead wife as a mother. Revival of primal object loss. Presents to the girl's relations appease the feeling of guilt connected with coitus. Combination of intensive with comparative methods of field anthropology and clinical psycho-analysis. Hostility within the matrilinear clan. The gute type of ritual stresses the hate aspect and the bwabware the love aspect of the original mother-child situation. Dream of Kaunamo: the tokwatokway or spirit mothers as protectors. 'Oboloma' or love as a protection against aggression. Libidinalisation of death. Compensation of the primal loss by the mourning women. Mourning rites in general are repetitions of the primal object loss situation. Defence mechanisms evolved in this situation: introjection, projection, repression. Aggression turned against the Ego. The scape-goat and blood revenge. Introjected and projected destruction. Oscillation is the characteristic feature of the mourning situation. Prolongation of this situation is a characteristic feature of advance in civilization. History and tradition evolved on this basis. The dead receive milk, prolongation of the infantile situation. The infantilism of Chinese civilization. Closing the mouth of the dead and feeding the dead. Filial conduct and the infantile situation. Retardation. Eros, Thanatos and Life.

The Changing Environment of Africans. Summary **58** of a Communication presented by Dr. E. B. Worthington. 23 February, 1937.

The thesis is maintained that the African is an organism depending on the physical and biological factors of his environment, and is undergoing evolution as the environment changes. Whatever may be the origin of variation in social structure and custom, natural selection has a last word in deciding whether any variation is of survival value, and to determine this survival value a detailed study of the environment is often more important than the study of the organism itself. The balance of nature, which is shown by analysing the African environment into its components, is not comparable to a weighing machine, but rather to a system of numerous levers and links all in balance with each other. Extra weight placed on any part of this system may cause the whole to change its equilibrium, and every lever to take up a new position. First, there is the surface structure of the land, the structure of underlying rocks and that of the overlying atmosphere, which three together

constitute soils and water supply. These determine the character of vegetation, which in turn provides subsistence for all animal life. Man himself may modify any of his physical and biological surroundings by destruction with the axe or with fire, and by means of cultivation or animal husbandry. Man's insect competitors, especially locusts and tsetse flies, determine and are dependent on many

environmental changes, and man also provides an internal environment which has been taken advantage of by parasitic organisms, many of which cause disease and thereby help to control his mental as well as his bodily health. In considering each of these components, examples can be selected which show change in progress, both of the environment itself and of man in his adaptations thereto.

OBITUARY.

Sir Grafton Elliot Smith, M.A., M.D., F.R.S., Litt.D., D.Sc., F.R.C.P. 1871-1st January, 1937.

59 It is with deep regret we record the death of Sir Grafton Elliot Smith at Broadstairs on the 1st of January. He was born at Grafton, New South Wales, in August, 1871, and had thus attained the age of sixty-five years. At the age of 17 he entered the newly-founded medical school of the University of Sydney and, after a distinguished career, graduated M.B. in 1892. After some experience in hospital appointments he became two years later a demonstrator in anatomy in the University under Professor J. T. Wilson. In his first year in this post in addition to three other papers he published a paper entitled 'A preliminary Communication upon the Cerebral Commissures of the Mammalia, with special reference to the Monotremata and Marsupialia,' the first of that remarkable sequence of contributions to the morphology and evolution of the brain which ensured him a world-wide reputation as one of the foremost authorities on the comparative anatomy of the mammalian brain, before he attained his 30th year.

This predilection for research work on the brain really became manifest at a very early age. From the time when he was a small boy playing on the sea beaches of Northern New South Wales he had been dissecting the nervous system of innumerable fish and also of great numbers of domestic animals; he never talked about what he found, nor did he give reasons for this preoccupation, and it is said that his school-fellows nick-named him 'Broody' for they felt he must be hatching something.

In March, 1895, he received the degree of Doctor of Medicine with honours from his University for a thesis, the subject of which was the anatomy and histology of the cerebrum of the non-placental mammal. The award of a travelling fellowship from Sydney University in 1896 enabled Elliot Smith to come to Cambridge where facilities were provided by Professor Macalister for him to continue his research work on comparative neurology. Later he became a University demonstrator of anatomy. Between 1897 and 1900 he published eight important papers dealing with cerebral morphology. At the invitation of the Council of the Royal College of Surgeons, London, he undertook to prepare a descriptive and illustrated catalogue of the unrivalled collection of brains preserved in their Museum. Published in 1902 this is still a standard work on the mammalian, and especially the primate, brain. In 1899 official

recognition to the outstanding importance of his work was given by his election to a fellowship at St. John's College to which he had been admitted, but three years earlier and on which foundation he afterwards became an honorary fellow.

During this time at Cambridge he was working alongside young enthusiasts in science who had come together from many parts of the world and the memory of those years and their fruitfulness was very precious to him.

In 1900 Elliot Smith left Cambridge to take up an appointment as the first Professor of Anatomy in the Egyptian Government School of Medicine, Cairo, where he remained nine years. While actively establishing the School of Anatomy he continued his studies on the morphology of the brain on which he published numerous papers. He also contributed many papers on other aspects of anatomy to the *Journal of Anatomy and Physiology* amongst other scientific journals. He often said that he set out determined not to allow the glamorous interest in the past to divert him from anatomy, but in Egypt were provided other spheres of work in which he became actively interested. A large area of Nubia in the vicinity of the Nile was destined to be submerged on the construction of the dam at Aswan. In this region were many cemeteries and Reisner was excavating these, exposing in the process many thousands of skeletons representing the population of the valley at all stages of its history. Elliot Smith went there in his vacations. Later, joined by Wood Jones, much time was spent in examining specimens and preparing records not only of anthropological characters but also of evidence of disease and injury. The results of these important studies formed the basis of the *Anatomical Reports* in the *Bulletin of the Archaeological Survey of Nubia*, of which the earlier sections were published in 1908 and the later in 1909 and 1910. He had opportunities of studying skeletal material from predynastic and dynastic burials in vast quantity and became interested not only in the racial origins and composition of the inhabitants of Ancient Egypt, but also in their religious beliefs and customs especially the origin and development of mummification. He contributed numerous papers on the subject of mummification among the seventy or more contributions to literature between 1900 and 1909.

In 1907 Elliot Smith was admitted a Fellow of the Royal Society.

In 1909 he returned to this country to occupy the chair of anatomy in the University of Manchester.

There, where he was in close association with W. J. Perry, he continued the study of the problems of the early origins of magic and religion and of the early migration of man. He was gradually led to formulate the theory that Ancient Egypt was the cradle of human civilization and that human culture spread by diffusion from this centre.

Among his publications dealing with mummification 'The Royal Mummies' which appeared in 1912 is of special importance because of the information anatomical examination gave on dynastic problems of Egyptian history. Another important publication was 'The Ancient Egyptians and their Influence on the Civilization of Europe' which appeared first in 1911 and in a revised edition in 1923. Based largely on his studies of skeletal material from different sources in Egypt he describes therein the evidence of the intrusion of a new racial element, the Armenoid, broad-headed type, in early dynastic times and the origin of megalithic monuments.

In Manchester he took an active part in the affairs of the Literary and Philosophical Society, acted as its president and made numerous contributions to its Memoirs and Proceedings and to the Journal of the Manchester Egyptian and Oriental Society.

In 1909 he delivered the Arris and Gale lectures on 'Some Problems relating to the Evolution of the Brain' and in 1911 another Arris and Gale lecture on the 'History of Mummification.'

In 1912 he presided over the section of Anthropology of the British Association at Dundee and took as the subject of his address the Neopallium.

The discovery of the Piltdown skull in 1912 provided the material for him to show his great interest in and knowledge of ancient man. As is well-known he and other eminent anthropologists did not quite see eye to eye on the best reconstruction from the few fragments. Associated first with Dr. J. Hunter of Sydney and later with Dr. J. Beattie, reconstructions more in keeping with his conviction regarding the true nature of the specimen than those resulting from the early efforts were ultimately made. Unfortunately, the controversy among anthropologists in regard to the reconstruction and the individuality of this discovery was never happily settled and seems likely to be revived in an acute form by the discovery of the Swanscombe skull. In 1919 he was Croonian lecturer at the Royal College of Physicians, the subject dealt with being the significance of the cerebral cortex.

We now come to the last phase. In 1919 Elliot Smith was persuaded to accept the chair of anatomy at University College, London, in succession to Sir George D. Thane. There he was able through the munificent benefaction of the Rockefeller Foundation to build up an anatomical institute on the most modern lines and to put into practice his views on the teaching and significance of anatomy. He was recognized as one of the foremost authorities on early man and was almost invariably consulted about the character and importance of any new discovery. He was the first to demonstrate the Rhodesian skull before the Royal Anthropological Institute in 1921 and gave the first account of the 'London' skull, the

fragmentary specimen found in excavating for the foundations of Lloyds' building in 1925. In 1932 at the International Congress of Prehistoric and Protohistoric Sciences held in London he expressed the opinion that the specimen was probably the earliest known example of the 'modern' type of man described up to that time. He took an active part in assigning to its proper position the skull of the Taungs ape discovered in 1925 and described by Professor Raymond Dart one of his former pupils. In 1926 the discovery of Peking man which was described by Davidson Black another of his former assistants, inspired largely by his enthusiasm, made him very active in acquiring all the information he could obtain about the specimens. He had special opportunities of obtaining the latest accounts of the successive discoveries because Davidson Black kept him regularly informed in regard to them and he was invited by the Chinese Government to go to China to report on the find. From his own observations he was able to confirm the conclusions of Davidson Black. He published numerous papers and lectured frequently on the subject. Thus he made known the circumstances associated with and the character and importance of the discovery to a wide public. The significance of Peking man was the subject of one of the lectures he gave in Edinburgh under the auspices of the Henderson Trust. He regarded the discovery as of special significance not only because of its intrinsic importance but because of the light it shed on the individuality of the Piltdown man and the manner in which it linked up the characters in *Neanthropus* and *Pithecanthropus*.

In 1932 he was partially incapacitated by a stroke and though this curtailed his activities to some extent, his interest in the subjects which he had made a life study suffered little, if any, abatement. His affliction was borne with great fortitude. In 1934 he was president of the section of Physical Anthropology at the International Congress of Ethnological Sciences which met in London and in his address gave trenchant expression to his views on theories of racial origins promoted for political convenience. He was Huxley Memorial Lecturer under the auspices of the Royal Anthropological Institute for 1935; the subject chosen being 'The Place of Thomas Henry Huxley in Anthropology.' He would also have been President of the Institute but for impairment of health. He was a past president of the Anatomical Society of Great Britain and Ireland. At the end of the academic year in September, 1936, he retired from the Chair of Anatomy in University College.

In the course of his active life he was the recipient of many honours from scientific societies and associations at home and abroad. For his services to science he received the honour of knighthood in 1934. He had been a Vice-President of the Royal Society and was awarded a Royal Medal in 1912. He received the Hon. Gold Medal of the Royal College of Surgeons of England, and the Prix Fauvel of the Anthropological Society of Paris. Amongst his other activities he served on the General Medical Council from 1913-19.

Elliot Smith's literary activity was phenomenal. The list of his publications numbers nearly four hundred items. Among his more important works not already referred to may be mentioned *Essays on the Evolution of Man* (1924), *Human History* (1930; 2nd edit. 1934) and the *Diffusion of Culture* (1933).

Elliot Smith fulfilled admirably the functions of head of a department intimately engaged in research work. He gave the kindest and most generous opportunity in his power to even his youngest and least experienced demonstrators; everything that was his was at their disposal if they could use it in any way; he demanded no personal return. In later life one of his outstanding qualities was an amazing generosity in making opportunities for young scientists, especially those from outlying parts of the

Empire, to enjoy a similar experience to his own.

This is but a brief account of the main events in a truly remarkable life. Some indication of the high esteem in which Elliot Smith's work was held by his contemporaries may be gained from the tribute paid to him by Professor Frazer in a footnote to his book on Embryology. This was to the effect that the older readers might wonder why there had been in the book so little mention of Elliot Smith's work on the central nervous system, but this was of the nature of 'foundations' and like 'foundations' was mostly out of sight. As for the future, his influence and example will be a guiding light to British Anatomists for generations to come.

MATTHEW YOUNG.

REVIEWS.

SOCIOLOGY.

Man Makes Himself. By V. Gordon Childe. London: Watts and Co., 1936. 7½ x 5 in. xii + 275 pp., illus. Price 7s. 6d.

60 Archaeologists are already deeply indebted to Prof. Childe for the invaluable books in which he has correlated the investigations of many men (including himself), into many cultural epochs, in many regions. Having explained archaeology to the archaeologists, in this latest book he makes it understandable to those who are without the fold—or rather, perhaps, he makes clear to all who care to read, including archaeologists themselves, how man has through the ages added to his cultural inheritance, and so built himself an environment in which we have to live. But not, one may add, an environment to man's own specifications or to any preconceived design. The story of human progress, a progress which we accept as a provisional reality, is dramatized by Prof. Childe without substantial loss of accuracy of statement, and with a pleasing freedom from speculative theorizing. He displays throughout his wide knowledge and balanced judgment, and he keeps the reader's attention from first to last, though some may find the section (in Chapter VIII) dealing with arithmetic and geometry, a stumbling-block to rapid reading.

Looking back upon the progressive steps in human history and prehistory, upon the discoveries and inventions that seem obvious to us, because they are part of our conditioning, Prof. Childe has selected certain phases as representing periods of revolution. It may, of course, be argued that the changes came about gradually, and that it is only in the perspective view that they assume the aspect of revolutions. If these, to deserve the name, must be as sudden, and as violent, and as sanguinary, as some of which we know, the objection may be upheld. But economic revolutions, as distinct from social or political upheavals, need have no catastrophic or volcanic features, and Prof. Childe is justified in his characterization of certain peaceful phases of transformation. The "Neolithic Revolution" was the first, with its change from food-gathering to food-producing, together with the development of domestic arts and crafts associated with a less nomadic or migratory, and a less precarious, mode of living. Arising out of this greater abundance of food and permanence of domicile, there followed, at no very long interval, the 'Urban Revolution,' with the development of towns and cities, co-operative irrigation and cultivation.

ambitious building-construction, trade and communication over wide areas, transport and the wheel, navigation and astronomy, writing and mathematics, affluence and poverty, theocracy and aristocracy, war and conquest, and much else, not by any means all to the good. Attendant upon the establishment of these large aggregations of men, with leisure and wealth unequally distributed, new needs and new luxuries demanded new means of fulfilment, and there was a 'Revolution in Human Knowledge.' Even science began to come into its own, but it was a building-up of 'science and superstition side by side.'

Man has made his cultural self, and Prof. Childe, out of the depths of his archaeological lore, has made the story live. It is a tale worth telling, and a tale well-told.

H. S. H.

The Economics of Primitive Peoples. By Stephan Viljoen. London: P. S. King & Son, 1936. Pp. 282. Price 12s. 6d.

61 To an economist the interest of a primitive society lies in an analysis of the methods of organization and social and economic control of a people with simple material technique; and in a comparison of the efficiency of the different means employed by primitives for the attainment of ends admittedly different from those of Western industrialism. For instance, it might be suggested that magic and myth determine to some degree a division of labour which in our society would be determined by relative wage rates regulated in the market by relative skill, bargaining power and other factors. The economist's business is not to praise or condemn the ends which a society seeks but to judge the relative efficiency of the means of attaining them and to analyse the interactions of these means.

At first sight it seems as if Dr. Viljoen is going to give us an analysis which would be refreshing after the descriptive and technological material which is usual in economic studies of primitive societies. His material is arranged under general theoretical titles, Demography, Technique, Transport, Division of Labour, Trade, Money, Distribution, etc. But one is disappointed. Perhaps the issue is prejudiced from the beginning by Dr. Viljoen's opening paragraph in which he says that since technical and social factors are closely related, a low development of technique implies also undeveloped forms of organization and control. Nothing could be further from the truth than to imagine that a people,

primitive by our standards of technique, have necessarily a simple social organization. Thus opportunities for analysis of complicated systems, such as the *Kula* trade of the Trobriands, are completely missed. This system, as every reader of Malinowski knows, is one of the most striking examples of an elaborate primitive organization for trade, all the more interesting to the economist because it is so largely ritualistic. Yet it is dismissed by Dr. Viljoen in less than twenty lines.

The stamp of the economist is lacking from this work. Unfortunately so also is that of the anthropologist. For the book is littered with sweeping and inaccurate generalizations about primitive people as a whole, as if all were alike. To give only a few examples: "Everywhere the expectant mother leaves her home and bears her child in the open or in rude shelters specially prepared for the purpose" (p. 65). "The life of the infant on the whole, however, is not a happy one. He has largely to sluff for himself. Mere babies have to search for their own food. At an early age the child is put to work . . . the girl from a tender age becomes a beast of burden" (p. 71). "Throughout primitive society, therefore, women are the doctors and often the surgeons as well" (p. 188). "Among all primitive peoples barter is in the hands of women. They are the first traders" (*ibid.*).

The best part of the book is in the first chapter, on Formative Factors, and this is more social biology than strict economics.

ROSEMARY UPCOTT.

The Sociology of Population: A Study in Societal Relativities. By Benoy Kumar Sarkar. Calcutta: Ray-Choudhury, Ltd., 1936. 130 pp.

This is an expansion of an address to a Population Conference, and it would appear to be inspired by a desire to show that, whether we consider growth of population, or distribution, or standard of living, India is not unique but has an assemblage of problems which are also illustrated in other areas.

It is a book which will give those who are interested in Indian and especially Bengalese life a certain amount of insight into the thought of Indian intellectuals. The declines in the growth curve of population in birth rates and mortality rates are clearly indicated: but whereas the West Europe birth rate began to decline soon after 1880 that of India remained very high until 1910, and is still high.

H. J. F.

Primitive Society and its Vital Statistics. By Lutwik Krzywicki. London: Macmillan, 1934. 589 pp., bibliography. Price 20s.

It is a reproach to anthropologists that they have failed to recognize the importance of the population and vital statistics of primitive races. They may attempt to excuse themselves by pointing to the similar neglect of these matters by historians who have perhaps less defence; but it is no adequate reply that a bad example has been followed. For no picture of any society can be at all complete that does not include some indication of the density and distribution of the population; the same may be said with hardly less force about vital statistics. There could be no greater contrast than between two societies, in one of which the expectation of life was twenty years, and in the other sixty years. But how much have anthropologists cared about these fundamental matters? Though there are some signs of an awakening to the importance of this topic, it has come too late. We know very little even about the vital statistics of those primitive races which have long been in contact with white races and have been much influenced by them, in spite of the recent interest in the dying-out of some of these peoples. We

shall never have more than fragmentary knowledge about the conditions before white men came on to the scene.

All that can be done now is to collect and scrutinize such numerical data as are to be found in the accounts of the earlier observers. As Professor Krzywicki says they are "of very doubtful value" and "have really got just by chance into the pages of books of first-hand information." Our author, who is the Professor of Social History in the University of Warsaw, has undertaken the immense task of surveying the material and has spent over thirty years on it. The work has been done with such thoroughness, as an inspection of the appendices will show, that it need never be repeated. There are four appendices covering over 240 pages in which all the references to numerical estimates of the sizes of African and of American tribes and confederacies are recorded. These appendices alone render the book of great and permanent value. In the text the data are analyzed and most interesting conclusions are reached regarding the average size of tribes and as to the number of tribes of different sizes. In this work of analysis the author displays admirable judgment, and extracts just as much by way of conclusion as the material will permit. His general result is that in Australia the average size of the tribe was under 550 and that of 123 tribes 70 had less than 500 members, while in North America three-fifths of the tribes had less than 1,000 members, though in this latter area a few confederacies had as many as 10,000.

Most of the text, however, is concerned with the vital statistics of primitive societies. It is more difficult, perhaps, to arrive at any conclusions in this field than in that of the density of population. The observed number of living children is almost always small, but it is very hard to say how far this is due to low fertility and how far to high mortality. The average number of children born to a woman in Australia seems to have been under five and in Africa under four. This indicates low fertility; but since all women married early, it is compatible with a high birth-rate. Child mortality was something approaching 50 per cent. in both areas. He has also some interesting estimates of age distribution and on other related topics. Professor Krzywicki is mostly concerned with establishing such statistical conclusions as can be drawn from the meagre facts. But he does permit himself some comments on the meaning of the conclusions, and he is especially interested in the sparsity of population and the related social isolation which is reinforced by the multiplicity of language. To this he attributes great importance in the understanding of primitive society. It is, however, for the material that he has so laboriously gathered together and so conscientiously analyzed that we are mostly indebted to our author. His work will be indispensable in every anthropological library.

A. M. CARR-SAUNDERS.

Gesammelte kleinere Schriften zur Ethnologie und Sociologie. III. By Professor S. R. Steinmetz. Gröningen (Noorhoff), 1935. 487 pp. Price 9 florins.

Dr. Steinmetz in this volume of collected essays ranges over a wide field of interests, many not strictly anthropological. In fact, the collection of 'Aphorisms' contains generalizations about life, women, religion and all those subjects on which the epigram thrives. Other essays treat of Eugenics, of the Jews in Europe, of what he calls Sociography, and of the pacifist tendencies of primitive communities. The essay on the Distribution of Work between the Sexes among Primitives illustrates his careful method of assembling and analyzing the

material of field-workers. Most of the essays have been reprinted from German and Dutch scientific journals; a few are printed for the first time. The book is pleasantly got up but lacks an index.

A. B. V. DREW.

A Decade of Progress in Eugenics: Scientific Papers of the third International Congress of Eugenics, held at American Museum of Natural History, New York, 1932. *Baltimore: Williams and Wilkins, 1934. xii + 531 pp., plates, portraits.*

This book is a collection of the papers read at the Third International Congress of Eugenics, held at the American Museum of Natural History in August, 1932.

It contains an introduction explaining the origin of the Congress in relation to the International Federation of Eugenic Organizations; and papers illustrating "study of agencies under social control which may improve or impair the racial qualities of future generations, either physically or mentally"; problems as diverse as the control of immigration and a test for

inheritance of musical capacity; studies of differential birth-rates, of the inheritance of diseases, of mental defect, of blood-groups; and of the basis of genetics. For students and practical workers there is a section on standard anthropometric measurement.

The address by Professor Corrado Gini, as head of the Italian delegation, affirms the necessity for statistical bases in all eugenic investigations.

A chapter is devoted to the measures taken in different countries for the encouragement of Eugenics. Readers will recognize, under the title 'Darwin and Pearson's Institute' (p. 358), the two separate organizations, the popular Eugenics Society, and the Galton Laboratory for National Eugenics, in the University of London, both founded by Francis Galton.

A collection of this kind should surely have included a paper on elementary statistics, but, taken altogether, this is a most useful collection, suggesting lines of thought to be more fully investigated. The critical student will find special value in the papers which give full references to original work.

M. N. KARN.

GENERAL.

The Origin of the Indo-European Races and Peoples. *By V. Chockalingam Pillai. Vol. I. Palamcottah, 1935. xxvii + 936 pp. Price £2 2s.*

The writer finds the clue to his problem in epic tradition of age-long feud between two races: the totemic title of one is *Bull*, the second is of dual build, composed of Wolf and Horso and conveniently labelled *Mark*. But there is a powerful solvent, *Snake*, which

makes it difficult (as the reader will find) to differentiate the three ingredients in the hybrid blend. 'Epos,' he thinks (pp. 43-4), shows that the Indo-European 'home' was in the Gondwana Continent, and that this was submerged about 5500 B.C. What happened then? The problem, as he says, is of world-wide importance, and this is only Vol. I of his treatise, dealing with Gaelic, British, and Teutonic 'Epos.'

J. L. M.

CORRESPONDENCE.

The Stone Age Cultures of Uganda. (Cf. MAN, 1936, 53).

67 In a few quarters some surprise has been expressed that I have not commented upon Mr. T. P. O'Brien's interesting article entitled 'Notes on the Stone Age Cultures of Uganda.' One reason for this is that I have been fully occupied with important matters that have little or no bearing on the Stone Age, and another is that I mislaid the issue of MAN for March, 1936, containing the article mentioned.

Although all the types of articles figured and referred to by Mr. O'Brien (as well as many others) had long been known in Uganda when the African Prehistoric Research Expedition commenced its work in this Protectorate nearly two and a half years ago, it falls to the credit of Mr. O'Brien to figure and name many of them for the first time; and while I agree with much that he has written in his article on this subject, there remain some points at which we appear to be at variance; but as Mr. O'Brien points out, his view is simply preliminary.

I incline to the view that Mr. O'Brien is right when he claims that the Oldowan tools (so far as Uganda is concerned at any rate) were generally made on blocks of stone rather than on pebbles; and I may add that I doubt whether the Kafuan was truly ancestral to the Oldowan.

Mr. O'Brien suggests that the flake implements he has named 'Cromerian' belong to the dry period between Pluvial I and Pluvial II. Again I agree, except that I think it belonged to the very end of the Interpluvial and/or to the beginning of Pluvial II.

In the taluses referred to, these tools are mixed with younger assemblages which include Chellean and Acheulean, and a good many years ago now I obtained a fine twisted quartz ovate from them. In one place, however, three rubble and boulder beds appear at the base of Pluvial II (or so I read the succession), and in

these the 'Cromerian' occurs in the 'pure' (unmixed) state.

I would not say that the Chellean does not occur widely in Uganda, but rather that its development is generally poor. Chellean and proto-Chellean tools can be found in association with ancient gravels as far north as West Madi on the Sudan border, and the evidence of the taluses already referred to, together with the mixed assemblages of contemporaneous and derived tools to be seen in a really large collection from the M-horizon suggests local transition from Chellean to Acheulean. The apparent break at the Nsongezi exposures is due to the physiographic conditions that prevailed there during the time of deposition of the deposits of the 100 foot \pm terrace. Deep pits sunk nearer the hills appear to be more enlightening in this regard.

According to Mr. O'Brien the N-horizon (which he was the first to name) is 'a good deal higher up than the M.' Except in certain pits which were filled in long before Mr. O'Brien and his expedition came to the country, this, so far as my knowledge goes, is not true, if Mr. O'Brien is speaking spatially. The separation is often non-existent (as it was in the case of my original M) and is seldom more than a foot or two, and while it is true that many remarkably crude tools appear in the N, it also contains some of extremely fine workmanship and symmetry. These tend to be very large; but relatively small tools are also present.

The O-horizon (Mr. O'Brien's nomenclature again) is something of a puzzle to me. It is described as a "well-marked implementiferous rubble . . . intercalated between more or less stoneless lake sediments." Personally I do not know it. So far as my knowledge goes there is no rubble between the N-horizon and the top of the 100 foot \pm terrace; there is, however, a widely distributed red horizon, variously emphasized, between the N and the top of the terrace: it appears to

be completely free from tools; it is true, however, that where, as in certain interesting washouts, it forms at the present time a temporary surface it is characteristically littered with post-N-M tools; but this is because its rugged, scoria-like surface acts in the manner of the especially prepared bottom of a sluice box and collects all but the lighter and smaller material which is washed away during the rains. If this red zone (if one may so describe it) is indeed O'Brien's O-horizon, then I cannot agree that 'there can be no doubt' the Tumbian occurs there. I would say that so far as my experience goes, it definitely does not.

As to the Tumbian (as identified by O'Brien). I found some tools of this culture *in situ* about five years ago. They were obtained from two pits sunk in the 100 foot \pm terrace between 6 and 10 feet from the top, but not from any definite horizon. I showed them to Dr. Leakey at Apis Rock, on our way to Oldoway in 1932, and I ventured to suggest that they might be classed as Still-Bay or proto-Still-Bay. Leakey, however, did not agree; he expressed the opinion that they were highly developed forms evolved from the Acheulean. I have no doubt he was right.

Lately I have recovered from the M-horizon a specimen which I can hardly doubt is a proto- or early-Tumbian tool, and another from a bed about a mile distant, which I take to be of the same age; while from the N I have extracted what appears to be a simple form of tranche. These tools will later be sent to Mr. O'Brien, because the origin of the Uganda Tumbian is his particular study, and I have no wish to encroach upon it. They are withheld at the moment only for the purpose of showing them to Professor van Riet Lowe, who will visit Uganda shortly.

The Levallois culture, or at any rate a core culture strongly recalling the Levallois, is of very early origin in Uganda; it seems to have been well in its stride by M-horizon times.

Lastly, may I say that Mr. O'Brien's reference to the '150-200 foot' gravels of the top terrace of the Kagera is not understood. The top terrace (neglecting higher, lateritized valley fillings, presumably of Pliocene age) is the 270 foot approximately. It is well and distinctly separated from the 200 foot \pm terrace. But it exists to-day only as scattered remnants. E. J. WAYLAND.

Oryx and Ibex as Cult Animals in Arabia. (Cf. MAN, 1937, 6.)

68 SIR.—In a recent work on the Sahara and Sudan,¹ some reasons have been suggested for believing that much of the pre-Islamic culture of the Sahara came ultimately from Arabia or beyond. The reasoning on which that suggestion is based is largely concerned with the cultural significance of the 'oryx' in the Sahara to-day, in the Sudan of Meroitic times, and in ancient Arabia.

In MAN, 1937, 6, there appears an interesting notice concerning *Ibex Hunters in the Hadramaut*, and the character of the 'ibex' as sacred to Athtar among the ancient South Arabians.

Major Jarvis, in "Yesterday and To-day in Sinai," p. 201, speaks of "the extinction of the bigger and heavier antelopes, and the oryx, which still exists in Trans-Jordan and the Hejas, and was . . . to be found in considerable numbers in Sinai also."

It seems more than probable that though the 'ibex' and its horns may have become a kind of 'under-study' for the 'oryx,' as the latter became scarce in the plains, yet the original cult animal of Ishtar, the mother-

goddess, and her counterpart the male-god, Athtar, was the 'oryx,' not the 'ibex': or, alternatively, that the 'ibex,' as Baal of the mountains, was analogous to the 'oryx' as Baal of the plains. In either case it seems evident that Aud or Wadd, the Minaean god whose name meant 'love,' was derived from the Mother Goddess of 'love' in the same way as was the male deity, Athtar; and that 'El Amt' or 'El Amd,' the earliest traceable Arabo-African name for the 'oryx,' must have been derived from the Minaean god name Wadd or El Aud, whence Lamta as a name for the Tuareg, from their shield (*lamt*) made of 'oryx' skin. Cyprius.

H. R. PALMER.

69 SIR.—The possibility that the dance of the Ibex hunters in the Hadramaut may be a pagan survival, as suggested by W. H. Ingrams, is, indeed, interesting in view of the fact that Yezidis, near Ba'adri, Kurds at Aqra in northern Iraq, and Iranis living at Meyhir between Isfahan and Shiraz, affix ibex horns and skulls to buildings. The ibex (*Capra aegagrus*) symbolizes strength and physical endurance, and the horns are decorative in form as well as symbolic in character. Camel skulls are used as scarecrows by Kish Arabs of the Hilla liwa in Central Iraq (see *Antiquity*, June, 1936, p. 223).

Hans Helfritz also reports the custom of fixing horns to buildings in the country between the Hadramaut and Yemen (see *Antiquity*, December 1936, p. 475, and Pl. V). O. G. S. Crawford (*Antiquity*, September 1935, p. 356, and Plate) observed sheep skulls on garden walls in Cyprus, and in a tall pine about two and one-half miles west of Kerynia. He also records the use of skulls as scarecrows at Eshery, near Sukhum, Abkhazia. U.S.S.R.

In 1928, while riding in the *jazirah* between Kish and the Tigris River, I saw several gazelle. Dismounting, I raised my rifle, but was prevented from firing by one of the Arab guides who kept repeating the phrase *karam* (forbidden), which often has a sacred connotation. He seemed perturbed and pointed to the gazelle tattooed on his inner right forearm. During the course of my anthropometric survey of the Arabs of Central Iraq (cf. *Field Mus. Nat. Hist. Anthr. Mem.*, IV, 455, Chicago, 1935) I recorded 71 individuals out of 398 who had gazelles tattooed on their right forearms. Further questioning regarding the purpose and meaning of this design revealed that this design, tattooed by some wandering gypsy woman (*kaulia*), was purely decorative and thus had no modern significance.

In view of the suggestions of Robertson-Smith, this may possibly be a form of degenerated totemism. It would be interesting to have information concerning other special rituals suggestive of animism or totemism among the peoples of south-western Asia.

Chicago. HENRY FIELD.

University of Edinburgh: Tweedie Exploration Fellowship in Archaeology and Anthropology.

70 This Fellowship is awarded for archaeological, ethnological, sociological, or linguistic exploration and research in the less-known regions of Asia and Northern Africa. The emoluments are about £200 per annum for two years, with a possible extension. Candidates must submit a detailed project of investigation, and satisfactory evidence of their experience of such work and their capacity to undertake the particular research proposed. The Fellowship is tenable along with other emoluments having a similar object. It is open in June, 1937. Applications should be made to the Secretary to the University of Edinburgh by 12th May.

¹ *The Bornu, Sahara and Sudan*. Sir Richmond Palmer, K.C.M.G., C.B.E. John Murray, 1936.

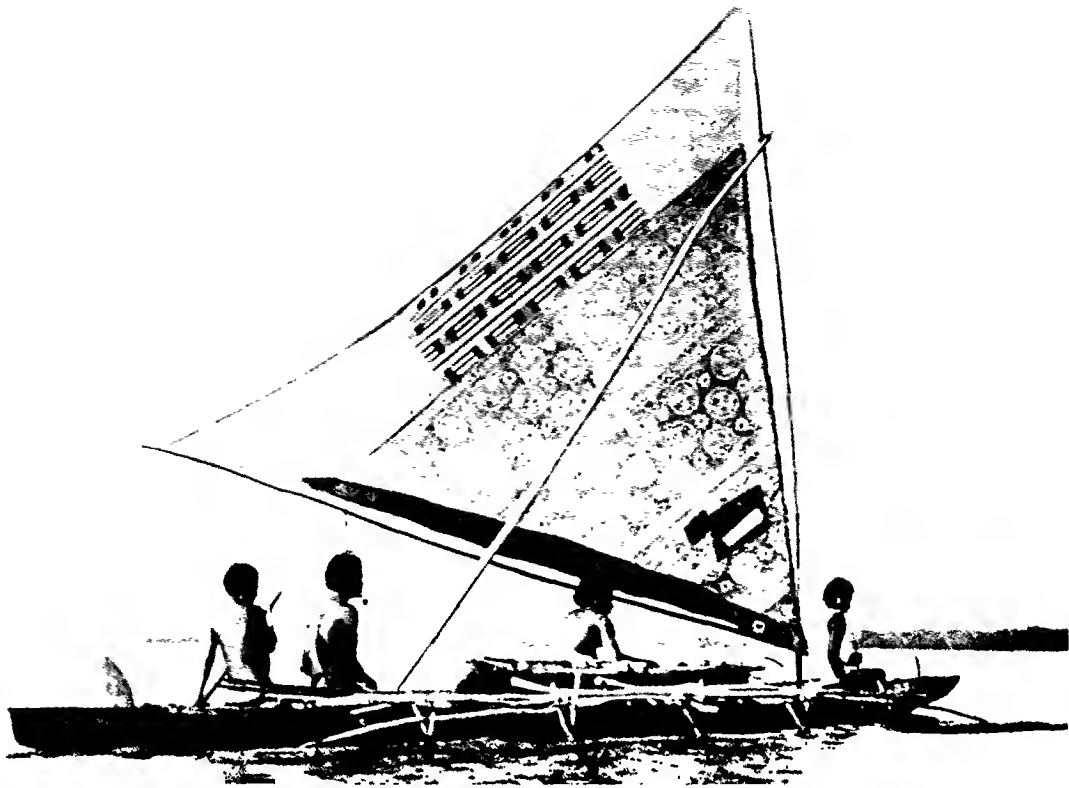


FIG. 1. CANOE (*Pau-Pau*) USED IN LIVE BAIT FISHING IN ONTONG JAVA.

Photograph by courtesy of Dr. Ian Hogbin.

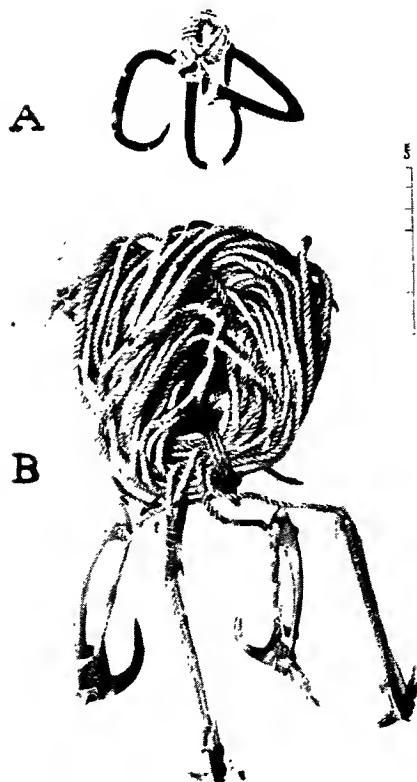


FIG. 2. TURTLE-SHELL HOOKS (A. *He-mang-r*;
B. *Kie-ka-ua*).



FIG. 3. WOODEN BOX (*Koo-au*).

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 71-88

APRIL, 1937

ORIGINAL ARTICLES.

Pacific : Technology.

With Plate D.

Lazarus : Beasley.

LIVE BAIT FISHING IN ONTONG JAVA. By D. M. Lazarus of Leueneuwa, Ontong Java ; with additional notes by H. G. Beasley.

71 This method of fishing for Bonito and other surface feeding fish—called in Ontong Java *E se'e*—was originally introduced from the Mortlock Group by a native named Simmie who is still resident at Leueneuwa. It is carried out only in fine weather, and the fish caught are of three or four kinds, Bonito, called *Halema* by Simmie, but *He-pa* by the local people: secondly a kind of mackerel *He-abo* and occasionally a few *Makabo* along the reef-edge on the return journey home. Also from time to time *Hung-a-mear* weighing up to six or eight pounds may be hooked. However, *Halemo* and *He-abo* are the species preferred.

The preparation for an *E-se'e* expedition is elaborate as will be seen by the following account, as witnessed by Mr. Lazarus. The canoe used was of a small type. Plate D, 1, called *Pau-pau* and the crew on this occasion consisted of four natives, a small boy and the writer. The equipment was composed of ten long bamboo rods, *He-makila*, five shorter ones and five sticks about 2 ft. long also used as rods; a coconut leaf basket, 8 ft. long by 1 ft. deep, with a rounded bottom and the top stayed out with sticks for holding the live bait was partly submerged. Some shell hooks *Kiri-kaua*, were taken as well as those of the ordinary type with the barb filed off so as to save time in unhooking, an important factor with so transient a quarry. Further a white calico bag *Moisie*, 6 ft. by 3 ft., having the top and bottom left open, furnished with two ropes, *Longu*, 58-60 ft. long, made of bush vines on which are twisted coconut leaves with their points projecting; this is required to catch the live bait.

It was during a period of calm weather that Hosivi, the headman of a canoe named *Kana*, asked Mr. Lazarus if he would like to *Haele, E se'e* ('go live bait fishing') and receiving his acceptance invited him to assist in the preparations. Hosivi, three natives and himself then set out along the beach for about a mile where two of the natives were sent into the bush, one to get the bush vines and the other the palm leaves. On their return all joined in the removal of the midribs, leaving only sufficient fibre to twist the leaves round the vines, thus forming two ropes, *longu*; one was finished as a loop and the other with a cross stick so that the two might be easily joined. The fronds, when tied to the ropes, were left projecting, so as to have a sweeping effect when dragging for bait. The finished ropes were then taken to the reef edge and with stone sinkers attached were left for three days when they became water logged and sank.

The headman then invited Mr. Lazarus to his house for attaching the lines to the rods. To the longer ones the ordinary hooks were fixed with the barbs removed, several to each rod, the lines of sufficient length to allow of being caught up under the handle so as to permit of a second line being brought quickly into play should the first be taken by a shark, *Kamonga*. To the shorter rods were attached the shell hooks, *Kirikaua*, as well as some of the ordinary ones, whereas to the very short

ones shell hooks only were attached varying in size as necessary for either *Halema* (Bonito) or *Heabo*. Plate D. 2

Early the following morning the gear having been stowed on the outrigger *Hae-ama*, the party set out for the reef where they picked up the *Longu* which (it will be recalled) had been left soaking on the water. The tide was then low and the water about ten feet deep so that it was possible to drag the bottom with the *Longu* and gather a number of small fry *Hae-ali-i*, which were transferred from the *Moisie* (calico bag attached between the two ropes) into the basket partly submerged amidship: any *Pauna*, a fish with poison barbs, were discarded.

The party arranged themselves in the following order, one native aft to steer, Mr. Lazarus, Hosivi (the headman) followed by the live bait basket, the small boy, and lastly another native in the bows. The canoe then proceeded outside the reef, where Mr. Lazarus was instructed in the rules of conduct for such an occasion, which included abstinence from talking, smoking and the throwing of anything overboard, all of which he carefully complied with to the satisfaction of the natives.

On sighting certain birds near the surface of the water Hosivi gave a sharp order and all paddled fast, he then put on diving goggles and peered into the water. Seeing the Bonito below he commenced throwing out live bait, one or two at a time and calling on his *Kipua* (in this case the spirit of his father) to make the fish bite. Baiting a hand-line he threw it out with immediate success, which was at once followed by the shattering impact of a shark against the side of the canoe just as the Bonito was hauled inboard. The shark, which was 14-16 ft. long had missed his quarry, but in spite of Hosivi's incantations to his *Kipua* succeeded the next time.

As there were by now from ten to twenty sharks of all sizes round the canoe, Hosivi decided that

his *Kipua* was not in favour of Bonito fishing, so, sighting some more birds, we paddled off in search of *Heabo*. After more searching in the water with the diving goggles, live bait was again thrown out and this time followed by the use of a long rod, which was immediately successful in landing a *Heabo*. Hosivi then called out *Korra* ('good') upon which all took up rods and started fishing with live bait. The small boy continued to throw out the bait and as the *Heabo* darted about and came closer to the canoe, Hosivi changed to a shorter rod and all followed suit. Later using the same rod, but a small hook unbaited, he drew it along the surface of the water with equal success. He then tried one of the shortest rods, but although practically successful gave it up on the grounds that the fish were not biting sufficiently well. It occurs sometimes that the fish will actually take the bait from the hands, so voracious are they.

After fishing for some time, the canoe pulled for the passage in the reef, where, lifting the *tabu* on talking and smoking, Hosivi gave a demonstration of the catching of *Makabo*. No live bait was used except on one small hook which was thrown out against the tide so that it would have sunk by the time it could have drifted level with the canoe. Having caught three of these fish, the party, one of whom was from Ako, landed on that island to obtain coconuts for drink which would otherwise have been *tabu* (*kapu*) unless a payment of fish was afterwards sent to the chief.

On returning to Leueneuwa the fish—50 in all and considered a fair catch—were carried to the house of the owner of the basket—the Bonito first—and all laid across the bearers' arms, which were first wrapped with a portion of one of the centre leaves of a coconut palm. Hosivi shared them out to everyone, including the owner of the house; the women then carried them to the recipients' houses, which in the case of one individual was the house of his prospective wife.

NOTES ON THE FISHING APPLIANCES FROM ONTONG JAVA. By H. G. Beasley.

72 The above firsthand account of Bonito fishing at Ontong Java affords a number of interesting details on a subject rarely touched on by field workers. Since fish is an important article of diet in the majority of Pacific communities, the process of their capture has over a long period become hedged about with observances and restrictions: hence the *tabu* on talking,

smoking and throwing things overboard, and the headman's invocation to his father's spirit for success.

It becomes apparent that the bonito swim in shoals attracted by the smaller fish, whilst the sharks follow the bonito; all take each other with great voracity and venture right up to the side of the canoe, the bonito at times actually taking

the bait from the hand. In other parts of the Pacific, bonito are taken with the spinner bait only, and no mention of live bait has occurred as far as my knowledge serves. As this method is recorded as having been introduced in recent times from the Mortlock Group it may be considered as a Micronesian introduction and not known therefore to occur in other parts of the Pacific.

Since variations occur in more or less detail between the bonito hooks from various groups it is possible to arrive at some interesting comparisons. The four hooks contained in the wooden pot, Plate D. 3, are reproduced in Plate D. 2a, *Kie-ka-wa* or *Hep-pa*. Each measure from $3\frac{1}{4}$ " to $4\frac{1}{2}$ " (8.3 cm. to 10.7 cm.), and is provided with a strong thick twisted line, *Hoo-wa*, 19 ft. long and of neat workmanship, having the ends tapering in the approved Polynesian style. The fibre would seem to be either banana or hibiscus which is attached by the usual Polynesian method, being carried down the inner side of the pearl shank direct to the turtle-shell barb. The great length of these lines would indicate that no other lines are attached to them, and that the bonito, *Ha-ack-oo*, are caught within twenty feet of the canoe. All the four hooks are strongly made, but lack somewhat the fine finish of those found further east. All are constructed in exactly the same way, and were probably made by the same hand. The barbs are of strong turtle-shell, with the edges neatly rounded off, and drilled with holes worked from each side, all being provided with human hair hackles. A point of interest is the occurrence—on one hook only—of a small wedge driven up between the barb and shank lashings: these wedges, together with other features all connect up with similar type-features from the Ellis Group, and occur nowhere else.

The occurrence of the close association of these hooks from two distinct localities raises the interesting question of migration, for it is obvious that similar types agreeing even in small details must have a common source of origin. The question of the origin of the Ontong Javanese has been dealt with by several recent writers, whose findings seem definitely to place the original influx as coming from the Carolines, an outstanding fact foreseen in the occurrence of the loom, as well as in cranial measurements. Weighing up the evidence it becomes clear that Ontong Java has experienced more than one culture influx, and

from several distinct and far-away localities. Thilenius as far back as 1902 (*Ethnographische Ergebnisse aus Melanesien*, Theil. I. Halle, 1902) published an exhaustive memoir of the origin of the peoples of the outlying Melanesian Islands where Polynesian culture-elements were in evidence. This memoir is accompanied by an excellent chart showing connexions with the following islands:—Nuguria in the Fead Group, Bismarck Archipelago, Bonape, The Tokelaus, Nukufetau, Ellis Group, Vayau, Tonga, Rotuma and Tongatabu: seven very distinct localities separated by some hundreds of miles of sea. Very obviously these culture-elements have been introduced at different intervals and over a long period. Most would be chance arrivals by storm-blown canoes, fortunate indeed to find shelter among a people of their own race and speaking a similar language. The few survivors of one such canoe would have little difficulty in introducing new methods and customs among such a small population as Ontong Java is capable of supporting. It would seem, however, that the native names for the hooks have been adopted from the source of their origin, since in the Ellis Group such a bonito hook would be known as *bawanga*: the prefix *ba* or *pa* being common in Polynesia for such objects, and also occurring in the local name of *hep-pa*.

The three smaller shell turtle hooks *He-mang-r*, Plate D. 2a, are modern reproductions of the old form, since none now exist on Ontong Java. In spite of their being modern, they are carefully cut out of a plate of turtle-shell and would be just as serviceable as were the old ones: two have pronounced in-turning barbs such as are found on the large wooden Ellis types; the third is roughly a segment of an oval and therefore does not seem very practicable. The short snoods are of twisted hibiscus.

To the best of my knowledge these do not quite resemble any other hooks from the Pacific, either in form or material. That on the right connects up in shape with the *palu* hooks of the Ellis Group, which however are of wood and may measure a foot in length, whilst that on the left represents a form entirely new in the Pacific. They measure approximately 2" (5.1 cms.) in length.

In Plate D. 3, is another interesting item of the equipment, a domed wooden box *koo-au* on four short legs. These boxes are no longer in use, and the specimen illustrated was obtained from the

present chief Makaite, who had retained it as an heirloom. The box has been laboriously dug out of the solid, whilst the top consists of half a coconut shell secured by *senit* cord passing

through the lugs of which there are four. When the hooks and lines are packed inside, the pot is full and some attention is required to put the lid on.

THE STATUS OF PITHECANTHROPUS. By Professor W. E. Le Gros Clark, F.R.S., Department of Human Anatomy, Oxford.

73 In a communication to MAN (1937, 1) on the fossil skulls recently discovered in Java and *Pithecanthropus erectus*, Professor Dubois states as a proposition that "*Pithecanthropus* was not a man but a gigantic genus allied to the Gibbons." He thus revives an opinion originally put forward by some German anthropologists at a time when this fossil was first engaging attention, an opinion which has met with progressively less support as the fragmentary remains have been more closely analysed and compared with other, more recently discovered, types of palæanthropic man.

Dubois' communication represents a general summary of a series of short papers which have appeared during the past few years in Proceedings of the Royal Academy of Amsterdam. It is of some importance to review the evidence which he puts forward in support of his contention, and to attempt to assess its validity. The evidence depends on the skull and endocranial capacity, the architecture of the femur, and a fragment of lower jaw.

It is on the endocranial cast that Dubois relies mainly for the truth of his proposition, for he makes the following very remarkable statement—"The strongest evidence of the Gibbon-like appearance of *Pithecanthropus*—is that given by the volume of the cerebrum. This is exactly twice that of an imaginary siamang gibbon with the body weight of *Pithecanthropus*, as computed from the chief dimensions of the femora." It must be admitted that this sentence hardly seems to make sense, for such an outstanding contrast in cerebral development would at first sight seem to demonstrate that *Pithecanthropus* must be quite far removed from the gibbons in its evolutionary status. But it appears that Dubois has discovered that the brain, in its phylogenetic development, grows discontinuously by doubling its size at each stage, the result of a simultaneous division of all the nerve cells. The evidence for this startling conception is put forward in a

paper published in 1935,¹ and consists of what must be regarded as quite inadequate observations on the relative brain weight in a few related groups of mammals. But even if this thesis rested on sound evidence, it would provide no grounds for inferring kinship between two animals because their cerebral development is different. Dubois records that the cerebral volume of the miocene *Procamelus* is half that of the present-day llama, and that the same relation is shown between the shrew and the mole. It does not follow from this that the llama belongs to the genus *Procamelus*, or that a mole is a shrew. Yet it is precisely this type of reasoning which has led Dubois to assert that *Pithecanthropus* is allied to the gibbons and is not human.

The endocranial capacity of *Pithecanthropus* is estimated by Dubois to be 900 cc. Other estimates are McGregor² 940 cc., Weidenreich³ 900 cc., and Weinert⁴ 1,000 cc., while Kappers⁵ seems to think it may have been as high as 1,030 cc. We may assume for the moment that the capacity lies somewhere between 900 and 1,000 cc. With this should be compared the endocranial capacity of *Sinanthropus* skull 1, which is estimated by Weidenreich to be 915 cc. Yet Dubois, while maintaining that *Pithecanthropus* is a giant gibbon, is equally insistent that *Sinanthropus* is *Homo sapiens*! We may note that, in endocranial capacity, *Pithecanthropus* even comes within the range of variation of modern man. A brain of a mentally normal individual has been reported by Hechst⁶ as weighing only 788 grams. Assuming, with

¹ Dubois E. *Proc. K. Ak. Wetensch., Amsterdam*. Vol. 38, p. 578. (1935).

² McGregor, J. H.: *Natural History*. Vol. 25, No. 6 (1925), p. 544.

³ Weidenreich, F.: *Palæontologia Sinica*. Series D, Vol. 7 (1936).

⁴ Weinert, H.: *Zeitschr. f. Anat. u. Entwickl.* Bd. 87, Heft 3 and 4 (1928).

⁵ Kappers, C. U. A.: *Proc. Kon. Akad. v. Wetensch., Amsterdam*. Vol. 32, No. 2 (1929).

⁶ Hechst, B.: *Arch. f. Psychiat.* Vol. 97 (1932).

Kappers, that the brain volume is 91 per cent. of the endocranial capacity, and that the specific gravity of the brain substance is about 1.04, this individual must have had an endocranial capacity of about 833 cc.

This is, of course, an exceptional case, but certainly an endocranial capacity of 1,000 cc. is well within the limits of normal variation for modern man. Apart from the gross size, however, there are a number of features to be noted in the endocranial cast of *Pithecanthropus* which indicate a human status. For instance, the convolutional pattern of the frontal lobes, so far as it can be discerned by impressions on the endocranial cast, is considerably more complex than in the brains of the anthropoid apes, and as Kappers⁷ has noted, by the extremely simple fissuration of its brain. *Hylobates* is further removed than any other anthropoid ape from *Pithecanthropus*. Again, even allowing for the maximum development of the sensory receptive areas of the cortex, the highest functional levels of the cortex as represented by the so-called "association areas" must have been incomparably more extensive in *Pithecanthropus* than in the anthropomorphous apes. The expansion of these areas can only be related to the development of mental attainments which are distinctive of the Hominidæ, particularly in regard to the local hypertrophy of the posterior part of the temporal lobe to which the late Sir Grafton Elliot Smith drew attention several years ago.⁸ Another point on which this eminent anatomist laid emphasis is the marked asymmetry of the occipital poles, a character which, it seems, only reaches such a degree of development in the human brain.

The characters of the femur which Dubois takes to indicate the gibbon status of *Pithecanthropus* are open to serious question. He seems to be prejudiced against the view that the Trinil femur is human because it implies "that the frame of man reached its perfection for pedal progression long before his brain attained its present complex structure" and this can hardly be so because "modern biology does not admit as possible the existence of any unfinished, imperfect species." The validity of this statement clearly depends on

the definition of an unfinished, imperfect species, and, indeed, seems to question the whole conception of evolution. Actually there is every reason to believe that in many groups of Primates the limbs acquired their final structure and proportions long before other parts of the body such as the brain, skull and teeth. The few fragmentary remains of limb bones of *Sinanthropus* indicate that this fossil hominid possessed limbs closely similar to those of *Homo sapiens*, in spite of the primitive characters of the brain and skull. The early lemurs of the Eocene (as represented by *Notharctus*) had developed a limb structure essentially comparable with that of modern lemurs, though the skull and dentition were still remarkably generalized. Similarly, the palæontological record of the Tarsioids shows that the specialized features of the hind-limb preceded in evolution many of the later specialisations of the skull and teeth. Every palæontologist is aware that the evolutionary development of different parts of the body often proceeds at different velocities. Dubois lays great emphasis on the bony architecture of the shaft of the lower end of the fragments of femora which he attributes to *Pithecanthropus*, and infers from this, as also from some indefinite markings for the ligaments of the knee joint and the contour of the lower end of the bone, that *Pithecanthropus* had thigh muscles developed for arboreal life, and a knee joint that allowed a considerable freedom of movement. It is difficult to assess the significance of these conclusions since the evidence for them is not systematically put forward or adequately documented. In his original paper dealing with these features, Dubois⁹ states (in rather vague terms) that the bony architecture of the femoral shaft in the anthropoid apes (including the gibbon) is somewhat similar to that of *Pithecanthropus*, but that the condition "is as much different from the condition in *Pithecanthropus* as from that in Man." It is difficult to understand why, therefore, Dubois implies (in his last paper in MAN) that the bony architecture of the femur of *Pithecanthropus* "furnishes proof of its close affinity with the gibbon." The arboreal habits which are believed to be related to other characters of the femur, also, have not been proved conclusively, and it seems doubtful whether many

⁷ loc. cit.

⁸ G. Elliot Smith: *Natural History*. Vol. 26, No. 3 1926), p. 294.

⁹ Dubois, E.: *l. c.* Vol. 35 (1932), p. 716.

authorities will be prepared to go even so far as Dubois when he states that "of course, these "more or less exactly described functions are "only probabilities."¹⁰ In a recent comparative study of the long axes of the femur in man and the anthropoid apes, Walmsley¹¹ concludes that in regard to the position of the load line, that is to say, in "the position of the bone as a "functioning structure, as has often been "pointed out of its other characters, the Trinil "femur is fully modern." He further notes that although in the relative lengths of the condyles and the convexity of the popliteal surface (on which Dubois lays such stress) it "diverges towards the gibbon" it does not do so "more than some modern femora do."

The evidence of the lower jaw fragment from Kedung Brubus is so questionable that it hardly deserves serious consideration. The fragment was discovered 24 miles from the locus of the Trinil calvarium, and it thus seems rather hazardous in the first place to associate it with *Pithecanthropus*. In any case the fragment is very small, confined to a triangular portion of bone from the chin region. According to McGregor, it indicates that the premolar and canine teeth were small and man-like, while the chin was practically vertical "somewhat like the Neanderthal chin." Certainly there is nothing here to justify the identification of the fragment as part of a gibbon's jaw. Finally, Dubois arrives at the remarkable conclusion that "the extensive depression for the anterior "attachment of the digastric muscle shows that "*Pithecanthropus* was devoid of the human "power of speech." In this connexion it may only be noted that the action of the digastric muscle is not particularly concerned in functions of speech, and even if it were, evidence showing

¹⁰ L. c., p. 722.

¹¹ Walmsley, T.; *Journ. Anat.* Vol. 67 (1932-33).

its high degree of development might surely be taken to indicate a rather unusual loquacity!

The most outstanding feature in the evolutionary development of Man from his simian precursors is undoubtedly the progressive expansion and elaboration of the cerebrum. It is, therefore, to this structure that attention must first be turned in order to assess the evolutionary status of fossil anthropomorphs whose position in the phylogenetic scale is uncertain. In the degree of its cerebral growth *Pithecanthropus* had attained definitely to a human level of development. This conclusion, moreover, is supported by the evidence of the major characters of the femur and by important dental characters. The similarity of the *Pithecanthropus* calvarium and endocranial cast to those of *Sinanthropus* is so close that they can be argued with some reason to be the remains of a common genus of primitive man. Even if such an interpretation should, with further discoveries, prove incorrect, it remains incredible that the one could be accepted as a gibbon, and the other as a representative of *Homo sapiens*.

Addendum. Since the above was written, reports by Weidenreich have appeared in *Nature* (15 February, 1937, p. 269) and the *Times* (18 February, 1937, p. 15) on the discovery of further skulls of *Sinanthropus*. This unique collection of fossil material finally demonstrates that the differences between the calvaria of *Sinanthropus* and *Pithecanthropus* are too small to provide reasonable grounds for insisting on a generic distinction. The slight differences in the supra-orbital region may only be due to the relative development of the frontal air sinuses. The variation in endocranial capacity in adult forms of *Sinanthropus* ranges from 850 cc. to 1200 cc., so that, in respect of brain volume, *Pithecanthropus* is by no means unique.

MacCrae and Lancaster.

By F. B. MacCrae and D. Gordon Lancaster.

STONE AGE SITES IN NORTHERN RHODESIA.

74 The following is a short account of three discoveries of stone implements in the Lundazi District of Northern Rhodesia. The first two were found by myself and Mr. D. Gordon Lancaster, Elephant Control Officer for the Eastern Province. The credit for the discovery of the third is entirely due to Mr. Lancaster.

Viziwa Forest—This site is that of a so-called

petrified forest. The remains of the petrified trees are, however, very fragmentary and none of them is more than 18 inches or 2 feet long. All the pieces are found lying on the surface of the ground. There is permanent water at one point in the bed of the Viziwa stream. The petrified wood is of a flinty nature and within living memory natives used to come to the forest to

obtain the stone for gun flints. The implements are a queer collection. Seven tools made on flakes, two end scrapers on blades of a definitely Upper Palæolithic type and six implements

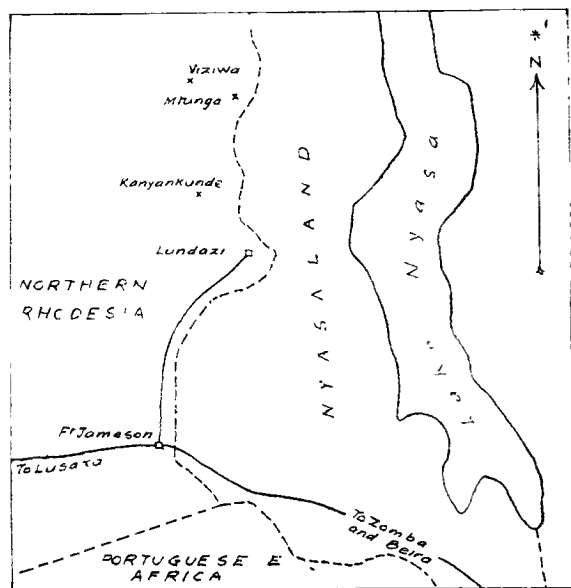


FIG. 1. SKETCH MAP OF LUNDAZI DISTRICT AND ITS NEIGHBOURHOOD.

Scale one inch equals about 75 miles.

employing a core technique. Of these last six, five are definitely of Lower Palæolithic type. Of course, the fact that they were found in close proximity does not mean that they all belong to the same period, but it is remarkable that they should all turn up in so small a space. Patination is not much help, for it would appear to be taking place rapidly at the present time; one implement that was half buried in soil shows two quite distinct surfaces. There is one well-used hammer stone.

The artifacts were all found on an out-crop of quartzite gravel not much more than 15 feet square. Similar out-crops occur in the neighbourhood, but though examined carefully they yielded no worked stones; all the specimens found came from the one small area. The material used varies from a rather coarse and opaque white quartzite through shades of grey and brown to a chocolate-coloured stone which is more a chert than a pure quartz. All show a certain amount of patination.

There are also three portions of petrified wood that show signs of human work. One displays an

excellent bulb of percussion; another, from its shape, would seem to belong to the era of gun-flints; but the third, which I illustrate, might very well belong to a more remote period. The obviously worked portion does not, however, display any patination. On the other hand the specimen which I take to be an imperfect gun-flint shows patination on its surface.

Mtunga Rock-Shelter.—This shelter lies half a mile from Mtunga village and about 35 miles south-east of Viziwa. The rock in which the shelter is situated is a soft sandstone and much of it would seem to have been eroded in recent times. The shelter is of no great depth and a good deal of the deposits from the site are probably scattered on the slope of the hill at the foot of the cliff.

Two specimens were picked up on the surface outside the shelter. One is a piece of grey chert and shows ample evidence of human workmanship and would seem from the patination to have been worked at two different periods; the other, which would appear to be of a basaltic nature, is suggestive in shape only; though a series of such stones might turn up and prove their human workmanship.

Kanyankunde Rock Shelters.—A number of rock shelters exist at a place known as Kanyankunde some miles to the north-west of Lundazi Boma. I have not seen these shelters; they were discovered by Mr. Lancaster, who excavated a small trial pit at the mouth of one of the shelters and handed me the various fragments of stone, bone and so forth that he obtained during the course of a few hours work. The site is evidently an ideal one from the point of view of primitive man and there is permanent water at hand.

Mr. Lancaster divided his excavation into two sections: *layer A*, 21 inches of guano, earth and ashes, and *layer B*, 15 inches of reddish cave earth. The two layers were separated by a deposit of small slabs of mica schist which appeared to him to have fallen from the rock that forms the shelter. There was a similar deposit at the foot of *layer B*.

In *layer A* were the following:—

- 9 Scrapers on cores or small pebbles of quartz or quartzite.
- 6 small notched scrapers:
- 1 small core used as a hammer stone:
- 1 small crescent, and perhaps portions of two similar implements.

- 1 piece of quartz crystal which would seem to have been used as a graving tool.
- 6 side scrapers made on flakes;
- 1 end scraper;
- 2 round scrapers;
- 3 plane-like implements similar to those found in the Mumbwa caves by Professor Dart (*Trans. R.S. of S.A.*, XIX, Part IV, page 412, Fig. 29 and page 413).

Bones and ashes and modern Bantu pottery.

In *layer B* :—

- 11 Notched scrapers:
- 16 scrapers on cores or small pebbles:
 - 1 combined core and notched scraper.
- 10 side scrapers;
- 5 end-scrapers of rather rude workmanship;
- 2 boring tools;
- 6 graving tools in two of which advantage seems to have been taken of natural quartz crystals;
- 5 rostro-carinate type implements;
- 2 plane-like implements (*see layer A ante*):
- 9 well-used hammer stones;
- 6 pieces of coarse pottery different in texture and better fired than the pottery from *layer A*;
- 2 fragments of bone:

Palestine : Archæology. **Starkey.**
A LATE HELLADIC VASE FROM TELL DUWEIR
IN PALESTINE. *By J. L. Starkey, Director of the*
Wellcome Archæological Research Expedition.
Illustrated.

75 Now that the successful Jubilee Exhibition of the British School of Archæology at Athens, at Burlington House, has provided us with a long awaited opportunity to see something of the art and ceramics of the Helladic and Minoan civilizations, perhaps it would not be amiss to describe an object found in central Palestine, which reveals the existence of trade connexions with the Greek Mainland as early as the fifteenth century B.C.

This last season's work at Tell Duweir, some twenty-five miles south-west of Jerusalem, has added to our knowledge of the relations between southern Palestine and other countries at this period. The XVIIIth-XIXth Dynasty temple area, below the north-west corner of the mound, has already proved a splendid repository of fine ceramics in the last phases of its occupation, and the contemporary rubbish-pits contained many decorated examples of foreign ware.

- 2 pieces of iron oxide evidently responsible for a number of crude markings on the walls of the shelter;

- 1 piece of polished basalt which one would like to record as a neolithic axe; but as one end is much abraded, it has evidently been used as a pounding and grinding stone;

- 1 large grinding-stone, similarly used but less weapon-like.

It is of course quite impossible to draw any inferences from these finds and they are merely recorded here as an indication of what may be found in the numerous caves and rock shelters in this part of Africa.

The material from the Kanyankunde shelter reminds me strongly of what I found in my own trial-pit at the Mumbwa caves some ten years ago. Unfortunately I was never able to see the actual material that was later obtained from there by Professor Dart and Signor del Grande, and I have only drawings to go on in identifying some of the present material with the planelike and rostro-carinate forms discovered at Mumbwa.



FIG. 1. LATE HELLADIC VASE FROM TELL DUWEIR, PALESTINE.

Height to rim 5.2 inches : handle above rim 1.7 inches.

Three superimposed buildings on this site have now been examined:—the small early sanctuary or Lower Temple, 1480-1420 B.C., the enlarged Middle Temple above it (1420-1335) and the



FIG. 2. LATE HELLADIC VASE, IN POSITION AS FOUND IN A SEALED DEPOSIT WITH LOCAL PALESTINIAN POTTERY. (The fragments are above the white pointer.)

restored Upper Temple, circa 1325 B.C. which was destroyed by fire, with many ritual objects in position, about 1260 B.C.

Among the vessels found in front of the Lower Temple altar, were the fragments of a goblet in fine yellow paste, decorated with black bands and a register filled with the connected, double-stemmed, ivy leaf pattern, in black changing to red (fig. 1).

Mr. Heurtley (late of the British School in Athens) saw the fragments in Jerusalem, and assigned them to the late Helladic II period, which flourished in Greece between 1500-1400 B.C. The vase can perhaps be dated even more closely; Mr. Pendlebury points out that this style of decoration has a short and definite span between 1450 and 1400 B.C. That the goblet should be found among the last objects deposited at the early altar (1480-1420), agrees admirably with the date independently assigned to it, based on well-known Palestinian pottery forms.

It is apparently the first time that an almost complete vessel of Late Helladic II ware has been found in Palestine, and the specimen is all the more valuable because it comes from a sealed deposit (fig 2).

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS

Asymmetrical Descent and Double Unilateral Affiliation. *Summary of a Communication, by Brenda Z. Seligman. 16 March, 1937.*

That unilateral descent does not imply non-recognition of the line of the other parent is well known, and it is not to this that I refer, but to a social structure where one line of descent is recognized for clan organization and the line of the other parent for other functions.

In 1928 I drew attention to certain types of prescribed marriage, and suggested that they were due to descent being reckoned according to one method by men and according to a different method by women ('Asymmetry in Descent, with special reference to Pentecost,' *J.R.A.I.*, Vol. LVIII). I called this asymmetrical descent. Marriage regulations of a similar kind have since been recorded in Australia and among the Gurkhas, but the system of descent has not been described in action in either area.

Since then a somewhat similar system, correlated to marriage rules of an asymmetric type, has been described in detail by Margaret Mead (*Kinship in the Admiralty Islands*, Anthropological Papers of the American Museum of Natural History, Vol. XXXIV, Part II, 1934). Here the marriages are asymmetric, i.e., a brother and sister cannot marry a sister and brother: a man must marry

into the clan of his father's mother or of his mother's mother, while his sister does not marry into the clans of any of the four grandparents. Clan descent is patrilineal for both sexes, and there is also an unnamed matrilineal descent line in which the two sexes participate differently.

It is the recognition of the lines of the two parents in the two different methods that for want of a better term I call *double unilateral affiliation*.

Among the Manus I believe asymmetric descent is combined with the double unilateral affiliation.

It is obvious that there cannot be double unilateral clan descent. The two lines may work synchronously to form classes, as in Australia and Ambrym associated with alternation of generations, or the two affiliations may have different functions.

Such a case has just been discovered among the Ainu by Dr. N. Gordon Munro. Clan descent is patrilineal, but there is a secret affiliation for women only in the direct matrilineal line.

There is now considerable material from West Africa, where the social organizations are governed by double unilateral affiliation.

Double Descent in a Nigerian Semi-Bantu Community. *Summary of a Communication, by Professor C. Daryll Forde. 16 March, 1937.*

Exogamous patrilineal clans (known as

yepun : sing. *kepun*), each with its own delimited dwelling area in the village, are the groups within which the economic activities of the individual households of Umor are organized (see MAX, 123, 1936, and 5, 1937). A child's membership of a *kepun* is normally established (1) by a birth ritual at the *kepun* shrine to which the mother is brought by the father a little before the birth is expected, and (2) by residence during adolescence. Girls leave the *kepun* territory at marriage, in accordance with the exogamic rule, to live with their husbands, while youths bring wives to live with them in the *kepun* dwelling area. Semi-voluntary male groups within the *kepun* co-operate in farming tasks while the *kepun* head and priest with the *kepun* 'farm-path elders' adjust and defend the land rights of individual members. The economic life of the village thus proceeds within the framework of the *kepun* and rights are normally acquired by patrilineal descent.

The number of adult males in the separate *yepun*, of which there are 30, ranges from about 30 to nearly 200, but is in the majority between 50 and 100. The larger *yepun* consist of a number of sub-groups or lineages of closer kinsmen, and there is evidence of extensive fission and recombination and also of the creation of new *yepun* as a result of the detachment of one or more lineages from a particular *kepun*.

Migration and the adoption of children also result in a considerable number of individual transfers of *kepun* membership. Individual migration of adult men sometimes follows personal differences or may result from residence conditions attaching to certain priestly offices. In both cases a matrilineal affiliation comes into play. Every child is born a member of the matrilineal kin group (*lejima* : pl. *yajima*) of its mother and the leaders of these *yajima* perform the great village seasonal rituals and dominate village affairs, as distinct from *kepun* affairs. The inheritance of moveable property, including harvested crops, is largely confined within the *yajima*, of which there are 23 in the village. The *yajima* are in general rather larger groups than the *yepun*. A man inherits only tokens from his father, but most of the property of a deceased brother or mother's brother. Cross-cousin marriage with the father's sister's daughter, whereby one's son may succeed through his mother's brother to property and status derived from one's own father, i.e., the *patrilineal* grand-father of the son, is regarded as desirable and praiseworthy. While *lejima* exogamy is not strictly enforced to-day except for the close kinsmen of *lejima* priests, endogamy is actually rare.

The migrations from the *kepun* of birth, referred to above, are usually either (a) to the *kepun* dwelling area of a mother's brother (after a dispute with patrilineal kinsmen), or (b) to a *kepun* in which a matrilineal fetish is permanently housed. While the migrating adult may maintain a divided allegiance to the *kepun* of birth and to that in which he lives, his children are usually taken for the birth ritual to the shrine of the *kepun* in which he lives and they may then, when adult and if they choose, take wives from the *kepun* to which their father was affiliated at birth. The tie with the ancestral *kepun* is thus completely severed.

Adoption of young children is frequent in Umor and the adoption of a sister's child by a man or woman is the most common form. It is especially sought by men without, or with few, sons and is an appropriate way of caring for a child, especially a boy, whose father has died during its infancy. Such an adopted child may become an heir to both his foster-father's wealth and also to his land rights for, despite his birth ritual, a child adopted in this way is usually given farming rights in the *kepun* of his foster-parent when adult and has the status of a member of the *kepun*. He in turn accepts its exogamic rule. He would not, however, be allowed to marry a woman of the *kepun* to which he was affiliated by the birth ritual.

Double unilateral affiliation in Umor thus regulates the succession to two mutually exclusive sets of rights and has also become a means of relieving stresses within the patrilineal kinship groups and of caring for orphaned children.

Megalithic Monuments. Boyle Somerville Manuscripts.

78 The late Vice-Admiral Boyle T. Somerville, C.M.G., R.N. (retired), bequeathed his archaeological manuscripts to the Royal Anthropological Institute. These contain a good deal of material with reference to orientation in ancient monuments, a subject in which Admiral Somerville was particularly interested.

A Committee, consisting of Mr. Harold J. E. Peake, Mr. C. F. C. Hawkes, Mr. A. Keiller, Mr. A. E. Bennett, Lt.-Col. R. E. Cunningham, Mr. M. C. Carr-Gomm, Professor L. Hogben and Mr. H. Hudson, has been appointed to make the manuscripts available to all those interested in orientation.

Any inquiries in connexion with the manuscripts should be addressed to Mr. H. Hudson, Great Ruffins, Wickham Bishops, Essex.

OBITUARY.

Giuseppe Sergi : 1841-17 October, 1936.

79 With the death of Giuseppe Sergi on 17th October, 1936, anthropology loses the doyen of the subject and at the same time a very distinguished pioneer. Sergi was born in 1841, he was educated at the Universities of Messina and Bologna and was appointed to the Chair of Anthropology in the latter university in

1880. He had already made a name for himself by his *Principles of Psychology*, published in 1874. In 1884 he was appointed to the Chair of Anthropology in Rome, where, largely owing to his energy and enthusiasm, the Museum of Anthropology and Laboratory for experimental psychology were founded. Although he published from time to time various papers on psychology, during the '80s and

'90s of the last century especially, he poured forth from his laboratory in Rome a series of important anthropological papers, more particularly in the *Archivio di Antropologia*. Some of his works were translated into English, notably *Le varietà Umane, principi e metodo di classificazione*, which appears



GIUSEPPE SERGI: 1841-1936

(From the portrait in *La più antica umanità recente*.)

in the Smithsonian Miscellaneous Collections, Vol. XXXVIII, and *The Mediterranean Race*, published in *The Contemporary Science Series*.

Sergi's interests in anthropology were threefold—classification, the Melanesians, and the history and development of the Mediterranean peoples—but he also published important papers on the Eneolians,

the Peruvians, and on skulls from the Russian *Kurgans*. In his numerous papers on the Mediterranean peoples, of which the first important paper to appear was *L'Uomo terziario in Lombardia* (*Arch. Antr.*, XIV, 1884), he covered a wide field from early man onwards. He believed that ancient peoples such as the Pelasgians could be definitely associated with certain racial characteristics. It is, however, for his work on classification for which he is probably best known. He felt that ordinary craniometrical observations often concealed important facts, since (for example) heads of very different shapes might have the same cephalic index. He proposed therefore to substitute for the observations in use a series of sixteen varieties based on shape. The best known of these more or less explain themselves, they are *ellipsoides*, *pentagonoides*, *rhomboides*, *ovoides* and *sphaeroides*. These main varieties were subdivided into sub-varieties and in some cases variations of the second order also were introduced. The nomenclature was always in Latinized form, thus: *Pentagonoides obtusus medius*, although he used the Italian in his book *La più antica umanità recente, ovvero la mirabile ricostruzione di un aretico tronco umano i cui rami si distesero dall'Africa in Europa, Oceania, America*, published in 1930.

It is, I think, characteristic of this extraordinarily intellectually active man, of whom a delightful and characteristic photograph appears as a frontispiece to the book mentioned above, that he published five, if not more, books after his eightieth birthday, and that he wrote to me when he was over 90 asking for the loan of photographs, and seeking some information about skulls in the Oxford collection.

His methods of classification, though they have been widely used especially in Italy, have not on the whole met with general acceptance. Anthropologists have probably felt that the system was both complicated and artificial and that it did not have the results which its distinguished originator had hoped for it. There can, however, be very little doubt that the suggestions which he put forward, even if they have not always been accepted, have always stimulated research, and his strict adherence especially in later work on the value of a purely morphological study of the skull, was of special importance and has borne considerable fruit. L. H. J. B.

REVIEWS.

ARCHÆOLOGY.

Preistoriska Vinča II. By Miloje M. Vasić. Belgrad, 1936, *cr.*, 200 pp., 367 fig., 21 coloured plates. III, *xxx* — 170 pp., 640 fig.

Volume I of this work was noticed in MAN, 1933, 186, but the author paid no attention to my plea for a summary in some other language than Serbian. Accordingly I must refer a reader who wishes to know what is in these volumes to his article "Colons grecs à Vinča" (*Revue Interne des Études Balkaniques*, I, i, p. 65, Belgrad, 1934). I would also draw attention to two articles by Vlad. J. Fewkes, "On the Interpretation

"and Dating of the Site of 'Belo Budo' at Vinča in Yugoslavia," (*Proc. Amer. Philos. Soc.*, LXXV (1935) 7, p. 651) and "Neolithic Sites in the Moravo-Danubian Area (Eastern Yugoslavia)," *Amer. Sch. of Preh. Research, Bulletin* 12, May 1936, pp. 5-81.

Dr. Fewkes has set out how Professor Vasić has changed his opinion about the date of Vinča, from Neolithic (1906), to Early Bronze Age (1905 and 7), and 1580 B.C. — 6 A.D. (1932, *loc. cit.* Vol. I), to his present position (1936, Vols. II, III, and his article "Colons Grecs"), that Vinča was founded about 600 B.C., and formed a "polis"

of Ionian Greeks, who exploited the cinnabar mines at Suplja Stena nearby, and the advantages of a site at a kind of river cross-roads on the Middle Danube, inviting trade in every direction.

This change of opinion is the most remarkable in my experience. Dr. Vasić asks readers to suspend opinion on it if they have not seen all the material collected in the Belgrad museum. But in these three volumes he gives us grounds for judgment and it is no longer possible to refrain. This later dating seems pure illusion, in its origin quite unaccountable, subsequently supported by secondary illusions. Dr. Vasić regards his settlement as similar to the mysterious wooden city of Gelonus in Scythia (Herodotus, IV, 108) said to be inhabited by Greeks driven out of the trading stations. But he entirely fails to account for the absence on a site, according to him inhabited by Ionians from the VIIth to the 1st Century B.C., of any metal objects to speak of, of money, and of ordinary Greek pottery such as he calls luxury wares. (II, 176.) He supports his main thesis by the strange idea that the rough and ready rendering of eyes and nose on terra-cotta figures and face-shaped vase-covers, which he formerly interpreted as gas-masks to protect cinnabar workers, really represented Greek Corinthian helmets: so the lines upon the heads representing hair, are for him crests, and those on the bodies the complete armour of a Greek hoplite with cuirass, tassets and greaves. He speaks of the general opinion as to Vinča and other such sites as the "Neolithic Mirage."

In discussing particular objects he usually finds some resemblance to Cycladic or L.M., dismisses it, and ends by discovering his closest analogies in Cyprus of the VIIth century B.C., which he conceives as having exercised its influence over Vinča through the Ionian colonization.

If we compare the objects he figures with those figured by Dr. Fewkes in his second paper coming from various sites in Eastern Yugoslavia, if we go further afield to Butmir in the West, to the Wallachian finds in the East, to Moldavia, Transylvania and Hungary, we see that Vinča is a central example of the great culture of the Danube valley and neighbouring regions, which beginning in Neolithic times seems to have lasted into the Early Bronze Age. Its relations to the Egean area are not at all clear—attempts to derive the culture of either area from the other have failed—and Greece does not really help much with the problem of dates. Fewkes, who knows the whole region suggests somewhere before 2500 B.C. for the beginning of Vinča and down to about 1800 for its later stages. He points out that the whole depth of the deposit being about 10.5 meters, the distinction between Vinča I and Vinča II set by Menghin and Childe at about 5.50 metres below the original surface, does not answer to anything very definite, the real distinction being between the round pit-houses below about 9 m., and the square wattle-houses above. Vasić regards these as not much separated in time, the pits representing the first settlement of his Ionians—anyway there seems curiously little difference in wares and artifacts through the ten metres of accumulation.

Given the language difficulty, and the strange views of the excavator, the use of these well-produced volumes becomes rather restricted: one can but say that in Vol. II there are many sections of the mound showing the pit-houses, the wattle-houses and post-holes, interments, particularly a large tomb approached by a dromos, and cremations at various levels through the mass; there are two plans of the ribbon-shaped area dug away, showing the position of some of these remains and, most interesting, what appears to be a defensive ditch (Erösd and Cucuteni alone have ditches as far as I

know). Then we have pottery of many types, including a great pithos some 1.28 m. high, a whole class of pots with covers in the form of faces, which Dr. Vasić calls 'Mystic Eyes,' one flat copper axe, one iron axe, one gold chain, a Roman (?) group of Aphrodite and Eros, one specimen of wheat. The colour and texture of the pottery can be well judged from the coloured plates. In the descriptions an inverted triangle denotes the depth from the surface at which an object was found. Vol. III shows hundreds of terra-cotta figures, interpreted in the strange fashion of which I have spoken, but the plates do show them.

It is with reluctance that one differs from an excavator who has given so many years to the study of one site, but he himself furnishes the material on which one can base one's own opinion, and one must freely use what he himself has furnished.

ELLIS H. MINNS.

The Mesolithic Settlement of Northern Europe.

By J. G. D. Clark, M.A., Ph.D., F.S.A.,
Cambridge University Press, 1936. xvi +
283 pp., 8 plates, 74 illustrations in the text and
loose map in folder. Price 25s. net.

In his earlier book, 'The Mesolithic Age in Britain,' Dr. Clark demonstrated the distribution of the Mesolithic cultures in this country and their relation to those which preceded and followed them. In this new and important volume he has provided a critical and comprehensive study of the complex series of cultures which are present in Northern Europe, or, as the sub-title of the book states, "a study of the food-gathering peoples of 'Northern Europe during the early post-glacial period.'" On current chronology this period is assumed to have occupied six millennia. The region studied is the portion of the plain of Northern Europe defined to the west by the mountain backbone of Britain, to the south by the highlands of Southern Germany, to the north by the mountains of Scandinavia, and to the east by the plains of Russia. Over this region the author has travelled extensively and studied intimately the rich store of archaeological material preserved in the museums and various private collections of Holland, Denmark, Norway, Sweden and North Germany. His conclusions are therefore based upon personal knowledge both of the cultural material and of the sites discussed. Equipped with the information and scientific training acquired during his studies under Mr. Miles Burkitt, and others, in the School of Archaeology at Cambridge, supported by practical experience gained in the excavation of Fen-Land and other Mesolithic sites in England and his extensive study of the British Mesolithic cultures, Dr. Clark was exceptionally well qualified to undertake the larger and more difficult task of disentangling the evidence in Northern Europe which his journeys disclosed to him. The outcome is a book of outstanding value to the archaeologist and, for the first time, brings into reasonable and orderly perspective the complex series of cultures known to exist in this region. The influence exercised by physical environment upon the development of primitive cultures has, as the author points out, long been a commonplace of archaeological and anthropological research, but the various factors have not hitherto been regimented and presented to the student in the concise and convincing manner which this book provides. Chaos has been resolved into a resemblance of order and the development of the cultures logically explained. These results have been made possible, and the general conclusions immensely strengthened, by the synchronization of independent researches by geologists, biologists, archaeologists and botanists; in particular by the modern system of pollen analysis. The book is a striking example of what can be achieved by co-operation

of this nature, and also of the interdependence of the sciences, and has resulted, in this instance, in a reliable presentation of the cultural sequence and its chronology, together with the influences of climate and environment upon its development and distribution. The author divides the early Post-Glacial period, with which he deals, into three divisions, and recognizes three groups of cultures and three traditions, distinguished by differences of origin and adaptation to differing types of environment. The overlapping of these, and the effect of culture contact on the one hand and of survival in isolation on the other—points so frequently overlooked by both writers and students—are here fully appreciated and discussed. The book is profusely illustrated by line drawings of artifacts typical of the various cultural divisions, also by distribution maps and pollen-analysis tables and diagrams. An Appendix provides valuable Fauna lists, list of objects and finding-places of Lyngby and Maglemose cultures, and of Tardenoisian sites; and the book, as a whole, furnishes to the student within its covers a wealth of information that would otherwise have to be sought amongst innumerable, and often obscure, publications. Incidentally, it should be noted that the Barbed Bone Points from Hornsea and Skipsea, Yorkshire, listed in the Maglemose sites and assigned to the Hull Museum, are in the British Museum, not at Hull.

A. LESLIE ARMSTRONG.

Cambridge Excavations in Minorca: Sa Torreta.

By M. A. Murray. London: Quaritch, 1934. 86 pp., *ix* plates.

The ruins here described, consist of a *taula*, surrounded by a temenos with annexed 'galleries,' and a *naveta* tomb. The former group was examined carefully by T. Balakrishnan Nayar. The *taula*, a monolithic pillar tapering downwards, as usual in the Balears, and supporting a flat stone as capital, stood 12½ feet high. Its base was fitted into a groove in the bedrock and flanked with uprights—to judge from the photographs—about a foot high—presumably to give additional stability. No measurements of the groove or stones, however, are given to emphasize the neat balancing involved. The deposit in the temenos was partially stratified with 'Nuri' ware near the floor and 'Carthaginian' high up. 'Nuri' ware was also found in the 'galleries'—very ruinous dwellings—and in one only was Iberian ware discovered in addition.

The *naveta* had been ruthlessly denuded to provide stones for farm buildings and field-walls. But the foundation course of uprights, 2 to 4 feet high, served to mark the outline of a chamber, 19 feet long by 6 feet wide. On its floor lay the remains of over 50 imperfect skeletons, in complete disorder and terribly comminuted, together with sherds of Nuri ware. The site was thereafter apparently used for profane purposes, perhaps as a stable in the later Iron Age. The relics contained in the primary deposit do not suffice to date the monument. A leaf-shaped socketed arrow-head found unstratified would in Egypt fall between 650 and 550 B.C. 'Nuri' pottery may be as late; it is, of course, the typical 'Bronze Age' fabric of the Islands but forms and designs might often be compared to Iron Age types of the Iberian Peninsula—the big jars with a cordon at the base of the short expanding neck, for instance have parallels there, while a pot like Pl. XXXIX, 2, is curiously reminiscent of 'Iron Age A' in Britain.

With commendable patience Prof. Cameron has pieced together, measured and described the fragments of human bones rescued with great pains by Dr. Murray. His valuable contribution occupies 50 pages of the book. In an introduction thereto, Sir Arthur Keith

points out that the disturbed and imperfect condition of the skeletons in a collective tomb like this, is due to the irreverent disturbance of earlier burials by the undertakers in charge of later ones. On p. 23, however, Dr. Murray has stated arguments for the theory that bodies were only deposited in the *naveta* after the flesh had decayed from the bones. The parallels from Greece and the fact that the grave-goods at Sa Torreta were no more regularly placed than the skeletons do not favour her thesis.

V. G. CHILDE.

Jouannet, Grand-pere de la Prehistoire. By

Dr. Andrie Cheynier. Brive: Imp. Chastrusse, Praudel & Cie. 101 pp., 3 plates. Price 15 francs.

As an intellectual subject grows, the pioneers are too apt to get forgotten unless some outstanding discovery has fixed their work for ever on the public imagination. Charles Darwin will never be forgotten, yet doubtless there were other workers in the same field, the results of whose investigations, though of less supreme importance, were none the less of considerable interest, but whose names the specialist of to-day hardly even remembers. Nevertheless, it is good sometimes to turn to these labourers of the past, if only to realize the difficulties with which they had to contend. Frere of Hoxne was just such a man. Properly speaking he should be called the great-grandfather of prehistory: yet until Mr. Reid Moir, some little while ago, drew attention again to his work his name had ceased to be remembered. Monsieur Jouannet, styled by Dr. Cheynier the grandfather of prehistory, is just such another. I confess with shame that until Dr. Cheynier sent me the little volume under review I had never heard of him. Yet he was a pioneer, even as was Boucher de Perthes. Born in 1766 Jouannet came of lawyer-printer stock. In due course he, too, passed his law examinations, but seems not to have practised. After the revolution, however, he took up printing and bookselling, firstly at Paris and then later at Périgueux. There afterwards he accepted a post as professor of Belles Lettres. From 1810 he became interested in Gallo-Roman studies, and he actually started excavations on the heights of Ecommeboe. Later on he began investigating deposits in caves. The most important of these latter was Badegoule—well known to-day mainly as a typical Solutrean site. Jouannet died in 1845. The list of his works is certainly imposing. While most of what he wrote is now, of course, out of date, none the less Dr. Cheynier has done well to rescue, from complete oblivion, the name of one who in his day seems to have been a delightful individual and to have added a number of bricks to the building of prehistoric knowledge just at a time when its foundations were being laid down.

M. C. BURKITT.

Shabtis. By Professor Sir Flinders Petrie. London:

British School of Archaeology in Egypt, 1935. 16 pp., 45 plates. Price 25s.

When Sir Flinders Petrie puts in to print some of his vast stores of knowledge, the result is always valuable and interesting. In the first chapter he traces the origin of the *shuabti*-figures, showing that they derive from the primitive custom of dismemberment, when the skull was kept apart and later added to the "body." In the early dynasties the skull was often reduplicated in the grave by a stone head; later a complete figure of the deceased, made as like life as possible, was set in the tomb-chapel. In the Middle Kingdom the figure had dwindled in size and was represented as a mummy; the earliest examples are without hands, the later forms show the hands emerging from the wrappings, at first the hands are empty, but

as tune went on the hands hold emblems or tools. It was not till the New Kingdom that the *shuabti*-figure was fully developed. It is then clear that the idea of the figure being a portrait of the dead person had changed into the belief that it was merely a servant to work for its master in the other world. Sir Flinders also shows the growth of the *shuabti* formula, which begins with the simple "O *shabti* of NN, made by his brother

" who causes his name to live," and continues increasing in complexity until in the twenty-sixth dynasty it has become a standardized inscription of many lines. The material of which the figures are made is also discussed, with interesting results as to the dating. It is a little startling to find that, in spite of the flood of books on Egyptology, this is the only book in English on the subject of *shuabti*-figures.

M. A. MURRAY.

INDIA.

Buddhist Cave Temples of India. By Major R. S. Wauchope. London: Luzac, 1936. 114 pp., 51 plates.

85

Major Wauchope's book on Indian Cave Temples does not add very much to our knowledge, but it will be read with interest by the general reader, who finds Fergusson and Burgess's monumental work too heavy and difficult to procure. Some of the author's statements are open to question. Buddhist relics were not 'displayed' to the congregation, as stated on page 8. The derivation of the horseshoe window from the pipal leaf

or rising sun (Plate I) seems to be merely fanciful. The same may be said of the comparison between the base of the pillar and Laksmi's Bowl of Plenty: the real explanation is that the pillar was originally wooden, and placed in a 'chatty' to keep off white ants! Major Wauchope includes several Hindu and Jaina caves; but he appears to omit the interesting caves recently discovered at Aurangabad. The book is illustrated by some excellent photographs by the author, who has travelled widely in order to take them.

H. G. RAWLINSON.

CORRESPONDENCE.

Evolutionary Parallelism. (Cf. MAN, 1936, 2.)

86

SIR.—Prof. W. E. Le Gros Clark has reminded us of evolutionary parallelism in human phylogeny. It is necessary to keep it in mind also in the domain of culture.

Polynesian languages afford some decisive examples. The same sound changes occur in this group independently, not by accident, but as the result of common tendencies. For instance, Hawaiian and Samoan have quite independently changed *t* into *k* (Hocart, *A Samoan Sound-change*, MAN, 1916, 28). It may be stated generally that Polynesian languages are very unstable as regards consonants, but they have a special tendency to weaken *k* into a glottal stop, change *s* into *h*, and to a lesser degree, *t* into *k*. They seem to have received an impetus in this direction which has continued after their separation.

Another striking case of evolutionary parallelism is the development of the leader of the vanguard in India and in Western Europe. Beginning as a king's menial who bears the palladium he has developed independently in both places into a great nobleman in supreme command of the army *vice* the king (see my *Kings and Counsellors*, Chap. XIII, Cairo, 1936).

One may adapt to culture the warning of Prof. Le Gros Clark, and say that "it is a risky business to attempt the natural classification of any culture by reference to one portion of its pattern only."

A. M. HOCART.

A so-called Minoan Vase from Macedonia. (Cf. MAN, 1936, 149.)

87

In MAN, 1936, 149, Miss Benton has tried to prove that Vase 69 from Olynthus is a Minoan relic made in the sixteenth century and that it as well as others which might have 'escaped the notice of the 'excavators' indicate Minoan influence at work in Macedonia in that century. The excavators would be the first to accept such an interpretation that would make their find so valuable, in spite of the fact that in so doing they would confess an oversight or error and cede the honour of the important discovery to an outsider, but they regret that fundamental and very apparent elements compel them not to agree with Miss Benton, and to insist that the vase cannot belong to the Prehistoric, much less to the Minoan Age. Before exposing the reasons for our belief we must emphasize first that certain similarities of this vase to a L.M.I. strainer from Gournia were

noticed in its publication as well as other decorative elements reminiscent of Minoan-Mycenaean styles. Also that before we accept Miss Benton's identification, we shall need more definite documented information. Our reasons for dating the vase as we did are based on the following:—

Shape: We regret with Miss Benton that the pictures published were taken from above, to show better the design, but in spite of that the type underlying the shape is apparent. It is that of a jar with an elongated body, vertical handles on the shoulder, and short vertical rim. When and where this type did originate is beyond our present objective, but we find it in the Archaic Period not only in Olynthus, but in the East Greek Vase area, in Rhodes for example, as we can see from the examples found in the cemetery at Ialysos. The shape continues in that island to the black-figured age.¹ The difference between these vases and the one under consideration is that the latter is of a larger size and is made to stand on a low stem. But that larger vases of the same shape were made, and that they were placed on a high stem, is proved by the 'Proto-Attic (Phaleron)' jar in the Fitzwilliam Museum.² The stem of that jar differs from ours, but that such stems as the Olynthian were known and made by the early historic potter is proved by well-known Cycladic craters, Boeotian plates, and by examples of our shape from the East Greek area.³ The Cretan jug which is cited as a parallel to ours is unfortunate,⁴ because its body, imitating a metal prototype, comes to a flat bottom surrounded by the well known metallic ring, and its foot is part of the vase, while in the Olynthian example we have the different members, the body and the stem, separate and attached in a manner well known from East Greek Amphorae. The long gradual curve from the base, 'found in many Minoan handled-jars' is vaguely brought in to indicate the Minoan origin. But is that element only a Minoan feature? What of the gradual curve of the Fitzwilliam example, or of the East Greek Amphorae, to take only well-known examples? It is perhaps interesting to remark that the strainer from Gournia, which could be compared with ours for its shape, has a globular body and a high stem entirely different from the Olynthian, but similar to that of the Fitzwilliam vase.⁵

Decoration.—The decoration is applied in horizontal friezes limited by broad bands. This arrangement has been taken to prove the Minoan origin of the vase. But this is the usual arrangement in the Greek world of

the Orientalizing period especially, as we see from the Rhodian, the Proto-Attic, and the Corinthian vases. Why postulate a Minoan potter and exclude an East or West Greek artisan? The use of broad bands is common on Olynthian and on East Greek vases of the sixth and later centuries, and even characteristic of our shape.⁸ The individual motives used in the decoration lead to a similar conclusion. On the shoulder of the vase we have a central plant-motive, of ivy, flanked by 'swastikas'. That plant-motives were used for the decoration of the shoulder of vases of the East Greek area, we learn from the well known Busiris Vase in Vienna;⁹ that ivy leaves were common for decorating the shoulder of vases is seen in the East Greek amphora.¹⁰ The arrangement is different, but the arrangement of Minoan ivy-motives is equally different. The plant-motive is flanked by 'swastikas' in an arrangement recalling very strongly the elaborate 'palmette' designs flanked by ducks used extensively in the early historic ware.¹¹ Apparently the swastikas are used as filling-in ornaments. We learn from Miss Benton that 'the Swastika is a favourite motive' in Crete. But when we turn to her references in the *Palace of Minos I*, Figs. 256, 260, and 519b, we find that the first two refer to the 'labyrinth' pattern which according to Sir Arthur Evans is 'a more elaborate development of the key and meander patterns' which in turn 'are a natural outgrowth of textile decoration';¹² the last, Fig. 519b—which should read 518b—refers to a clay 'seal-impression from the West Temple Repository'—eighteen examples of which occur, most probably made from the same seal) bearing a swastika 'placed over a 'horned sheep.' In connexion with this particular example, Evans states that its swastika 'is a religious symbol' and on the swastika in general he teaches that it occurs as a Minoan sacred symbol, probably astral 'or solar' and not as a common filling-in-ornament in the vase-painter's repertoire.¹³ Not a single L.M. vase made in Crete and illustrated by Evans in his *Palace of Minos* exhibits a painted swastika, and this seems to contrast strangely with Miss Benton's assertions that it is 'a favourite motive' in Crete. In the mainland of Greece it is not so common either, but is sparingly used in L.H. times. Wace in his excellent study of the numerous vases from the cemetery of Kalkam does not even mention this motive.¹⁴ On the other hand the 'swastika' is one of the most common filling ornaments of the East Greek variety, as a rapid survey of the Rhodian ware will prove immediately.¹⁵ This decorative element alone would be sufficient to exclude a Minoan attribution.

On the shoulder and below the handle we have two spirals back to back between which rises a heart-shaped leaf. This also has been compared to similar L.H. and not Minoan motives. Yet the spiral-bracket with palmette over its back, is the most common ornament on the East Greek amphora,¹⁶ furthermore we can find the identical pattern on Melian amphora, even placed in the same position.¹⁷ These Melian vases certainly were not made by Minoan potters. Below the frieze of the shoulder we have one decorated with almost parallel wavy lines. Such friezes so placed are very common in Early Greek vases, in Melian, Proto-Attic, Chalcidian, and Boeotian.¹⁸ The ivy decoration that forms the last frieze of the Olynthian vase, as was pointed out in the original publication, recalls strongly Minoan-Mycenaean compositions. Evans has proved that the ivy-leaf was naturally reproduced on L.M. Ib vases,¹⁹ but the ivy remained a favourite decorative motive down to the end of the Hellenistic period. We find it in detached leaves, in branches, in wreaths, painted in a dynamic way, around the neck, the shoulder, or the body of East Greek, black-figured, red-figured, South Italian, and even Roman vases.²⁰ In fact the arrangement of the leaves on

either side of a painted line favours a historic and not a Minoan painter for our frieze. The most common Minoan arrangement is that of leaves on a double stalk, coming out of rock formations, or connected by their stalks. We find the last arrangement in the Gournia pedestalled bowl. On the L.M. jar of the Macro Spelio Cave, that was cited as a parallel, (*B.S.A.*, XXVIII, 1926-1927, p. 268 and Fig. 21) we again have double-stalked ivy leaves placed by themselves in two friezes separated by a band. The life and dynamic arrangement of the Olynthian ivy is entirely absent from the Minoan example. The double-stalked ivy is also the common type on the mainland L.H. vases.¹⁹ Our ivy-frieze can have no relation to the Minoan arrangement and cannot be proven, on the basis of the published data, to be the work of a Minoan artist.

Stratification—It has already been stated in the original publication, that the vase was found in one of the granaries of the Meghal Tomba. These granaries, as proved by their contents, were filled after the destruction of the city, presumably by the Persians in 479 B.C. Since most of the pieces of the vase were found together, it becomes apparent that the vase must have been in use, or must have been complete, immediately before the destruction of the city and before the filling-in of the granaries and that it was made some time before that event. That time cannot be very long, not a full millennium as Miss Benton suggests, but at the most fifty or so years. Consequently the place and conditions in which the vase was found will date it in the historic period.

Summarizing the evidence obtained from the study of the shape, the decoration, and the stratigraphy, we can conclude that Vase 69 from Olynthus must be placed certainly in the historic times and apparently in the sixth century. The Minoan-Mycenaean elements which are noticeable in this as well as in the other vases of this group were pointed out in the original publication, where it was stated that they were 'due to the preservation of Mycenaean motives in the eastern islands of the Aegean and in Asia Minor. These motives found their way to Greece proper as part of the artistic stream which flooded the motherland in the archaic period.' To attribute this vase to a Minoan conquest or potter is not justified by the facts, and for the time being we can still maintain that there are no traces of Mycenaean or Cretan influence in Macedonia before 1400 B.C.

Miss Benton indeed mentions two Mycenaean sherds in the Saloniki Museum. But in view of her identification of the Olynthian vase, one is justified in wondering whether these are Mycenaean and whether they were found in Macedonia. And since the reader of her article might infer that the 'olive press room' (not a 'granary' as Miss Benton says) at Olynthus which recalled the 'kaselles' of Knossos was Minoan and that the pithos found near it was prehistoric, we may repeat that the structure was Byzantine and so was the jar.²⁰ Apparently Miss Benton was looking for a Minoan pithos in the Museum of Saloniki, which she could not find. As to the supposition that Mycenaean sherds might have been stranded on the field, I am afraid it does not call for serious consideration. The excavators and a host of visitors were unable to see them.

GEORGE E. MYLONAS.

Washington University, St. Louis, Mo.

REFERENCES.

- ¹ *Olynthus*, V, Pl. 36. Boehlau, J., *Aus Ionischen und Italischen Nekropolen*, Pl. II, 4; IV, 3; IX, 2. C. V. A. *Rodi I*, III He Pl. 7, 3-4; *Rodi II*, III C, Pl. 8, 5; II Dm. Pl. 3, 5; III F, Pl. 5, 6. Corinthian examples of this shape in pyxis sizes are too well known.

² Lamb, W., in *C. V. A. Cambridge I*, III G, H., Pl. II, 7. Compare with H. Payne, *Necrocorinthia*, Pl. 29, 6.

³ Cf. *C. V. A. Sévres*, II E and II F, Pl. 12, 1-3. *U.S.A. I*, Pl. 2, 1; *Cambridge I*, III G, H., Pl. II, 5-6. Boehlau, 1, c., Pl. VIII and Pl. IX, 2. *U.S.A. V*, Pl. XI, 1, etc. Cf. Payne, 1, c.

⁴ *Palace of Minos II*, Fig. 312a.

⁵ Boyd-Hawes, *Gournia*, Pl. IX, 1; and *Palace of Minos II*, Fig. 292.

⁶ *Olynthus*, 1, c., Pl. 36. *Rodi II*, II Dh, Pl. 8, 2, 3, etc.

⁷ Cf. Pfuhl-Beazley, *Masterpieces of Greek Drawing and Painting*, Pl. 7, Fig. 11, or even Beazley-Ashmole, *Greek Sculpture and Painting*, Fig. 46. Compare with neck ornament of vase in *Rodi II*, II Dh, Pl. 7, 1.

⁸ Cf. *Rodi I*, II D1, Pl. 2; Pl. 5, 3; Pl. 6, 4; *Rodi II*, II D1, Pl. 9, 3; Pl. 10, 2, for a few examples taken at random, that could be added to ad infinitum. Rumpf, *Chalkidische Vasen*, Pl. CLXIII, 177; CLX, 178, etc. Especially *C. V. A. Pays-Bas I*, III E and F, Pl. 1, 3.

⁹ *Rodi II*, II Dh, Pl. 7, 4. Rumpf, 1, c., Pl. LXXXVI, 48, etc.

¹⁰ *Palace of Minos I*, p. 357-358.

¹¹ *Ibid.*, p. 358 and 515.

¹² A. J. B. Wace, *Chamber Tombs of Mycenae*, *Archæologia*, LXXXII, Oxford, 1932. For mainland swastikas, cf. G. Karo, *Schachtgräber von Mykenae*, Pl. CVI, 206; CXLIX, 161; *Palace of Minos II*, Fig. 291c. and 297b. g; IV, Figs. 204, 207. *Ath Mitth.*

¹⁵ Fowler and Wheeler, 1, c., Figs. 371, 372. Conze, *Melische Tongefasse*, Pl. I; *J. H. S.*, XXII, 1902, p. 49 Fig. 1; p. 51, Fig. 3.

¹⁶ Boehlau, Pl. X, 5. Rumpf, Pl. CXXXI, 120-121; CXXXIV, 150, etc. Fowler and Wheeler, 1, c., Fig. 372. Pfuhl-Beazley, 1, c., Pl. 2, Fig. 2. *C. V. A. Danemark II*, IIIC, Pl. 68, 2; *Pays-Bas I*, IIIG, Pl. 1, 4-5. Compare with the well-known half-moon frieze of the East Greek amphoræ.

¹⁷ *Palace of Minos II*, p. 488.

¹⁸ References are really superfluous, but here are some at random in addition to those of footnote ⁸. *C.V.A. British Museum III*, III, 1, c, Pl. 17, 3; IV, III 1, c, Pl. 36, 4. *B.M. VII*, IV Da, Pl. 11, 7; Pl. 11, 8. *B.M. IV*, III He, Pl. 72, 3. *B.M. I*, IV De., Pl. 2, 4. *Italia I*, III He, Pl. 11, 1. *U.S.A. IV*, *Robinson Collection I*, Pl. XXIV, 2; XXV, 1a; etc., etc.

¹⁹ *Palace of Minos II*, Figs. 291-295 and 297. IV, Fig. 746. Wace, 1, c., Pl. II; Pl. V, 7; Pl. XXXIX, 30; Pl. XL, 28, etc. Mylonas, 1, c., Figs. 92, 104, 106, etc. The common Minoan ivy leaf is broad at the base, altogether different from the Olynthian example.

²⁰ Robinson, in *Olynthus II*, p. 2 and Figs. 23, 28.

88 The Editor allows me to say that, with the addition of some unpublished Minoan vases with swastikas in the Candia Museum, Mr. Mylonas' references admirably illustrate my meaning. The vase profiles of references ¹⁻³ contrast with the unbroken indeterminate curve of my example (ref. ⁴)



FIG. 1. THE VASE FROM OLYNTHUS.
(Repeated from MAN, 1936, 149.)



FIG. 2. ANOTHER VIEW OF THE VASE FROM OLYNTHUS.
(Compare the ivy-pattern, MAN, 1937, 75.)

XXXIV, 1909, Fig. 15 and Pl. XXIII, 2. Mylonas, *Prehistoric Eleusis, in Eleusiniaka I*, Fig. 105.

¹³ Cf. any elementary handbook on vase-painting.

¹⁴ Boehlau, 1, c., Figs. 22, 23, 25. Fowler and Wheeler, *A Handbook of Greek Archæology*, Fig. 370. *C. V. A. Rodi I*, II D1, Pl. 2, 1-2; *Rodi II*, II D1, Pl. 7, 1, 4; Pl. 8; Pl. 9, etc.

and of the Olynthus profile, of which another illustration is given in Fig. 2. The vase from Gournia (ref. ⁵) is made in two parts, and shows that a high foot does not prove the Olynthus vase Hellenic: the Gournia vase is decorated with ivy on a single stem. Where is the 'palm-ette' over the back of the spiral-bracket on the Olynthus vase (ref. ¹⁴)?

SYLVIA BENTON.



a, b, c Greenland Eskimo thong-smoothers *d, e, f* Alaskan arrow-straighteners.
g, h, i Copper Eskimo arrow-straighteners. *k* Copper Eskimo bow-adjuster.

**ARROW-STRAIGHTENERS, THONG-SMOOTHERS, AND
 BÂTONS-DE-COMMANDEMENT.**

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 89-112

MAY, 1937

ORIGINAL ARTICLES.

Canada : Technology.

With Plate E.

Jenness.

ARROW-STRAIGHTENERS, THONG-SMOOTHERS, AND BÂTONS-DE-COMMANDEMENT. By
Diamond Jenness, National Museum of Canada, Ottawa.

89 The National Museum of Canada, Ottawa, possesses a number of arrow-straighteners from Northern Alaska and from the Copper Eskimo region, and also a few thong-smoothers from Greenland. Judging from these specimens, and from the illustrations in the literature on the Eskimo, the two implements, though rather similar in shape and made of the same materials, ivory, bone, or antler, were formerly at least quite distinct.

The slot in the arrow-straighteners, from whatever region they come, averages about $\frac{3}{4}$ -inch in diameter. In Northern Alaska it is always lozenge-shaped,¹ whereas among the Copper Eskimo it varies from almost circular to triangular and even rectangular. In every case, however, it is bevelled in the same direction at front and back to prevent any denting of the arrow-shaft, which was almost always made from soft spruce-wood. Some Alaskan specimens are neatly carved at the fore-end into two opposing animal heads, and the handles are decorated with realistic engravings, or with the common dot and circle design. Decoration of this kind was alien to Copper Eskimo psychology, although the tribe was not altogether lacking in inventiveness, as evidenced by the arrow-straightener with rectangular slot (Fig. *h*), which is slightly hollowed at the two front corners so that two arrows can be straightened simultaneously.

In contrast to the arrow-straighteners, the thong-smoothers from Greenland are cruder implements, with smaller holes (too small for an arrow-shaft), that are either not bevelled at all, or bevelled at the edges only.² Those figured by Boas from the Hudson Bay region (*Eskimo of Baffin Land and Hudson Bay*, Bull. Amer. Mus. Nat. Hist., XV, 1901, p. 31, and *The Central Eskimo*, 6th Ann. Rept. Bur. Amer. Ethnol., 1888, p. 522) show the same characteristics, whereas the arrow-straighteners illustrated by the same author (Bull. XV, A.M.N.H., p. 84, and 6th Ann. Rept. B.A.E., p. 525) show larger holes with parallel bevelling, as in Copper Eskimo and Alaskan specimens. This suggests that Birket-Smith may be mistaken in giving the name arrow-straightener to the specimen from the Caribou Eskimo that he figures in his admirable work on those natives (*The Caribou Eskimos*, Report of the Fifth Thule Expedition, 1921-24, vol. V, part I, p. 106); for the hole seems exceedingly small, and its sharp edges would certainly dent any arrow-shaft capable of passing through it. A similar criticism applies to the popular assumption that the Magdalenian 'bâtons-de-commandement' were really arrow-straighteners; for the illustrations I have seen of these objects seem to reveal circular holes with rather sharp edges, such as one would imagine to be scarcely suited for the straightening of arrow-shafts.

¹ Cf. the specimens figured by Hoffman, W. J., *The Graphic Art of the Eskimos*, Rep. Smithsonian Inst., 1895, Plate 7.

² Cf. also Thalbitzer, W., *The Ammassalik Eskimo*, Meddelelser om Grønland, XXIX, p. 482, and Birket-Smith, K., *Ethnography of the Egedesminde District*, Meddelelser om Grønland, LXVI, p. 106.

In conclusion may I call attention to an implement that I have not seen mentioned in any work, viz., the bow-straightener or bow-adjuster that was used by the Copper Eskimo. It resembled the arrow-straightener, but was necessarily much larger and for that reason always made of wood. The slot was always rectangular, and it was

bevelled on opposite sides, and on both faces, to produce two sharp edges, one slightly higher than the other (Fig. *k*). I have seen Copper Eskimo hunters use this tool to adjust the fitting of the 'horns' with the centre-piece of their composite bow; whether it served also to regulate the curvature of the centre-piece itself I have no knowledge.

AGRICULTURAL METHODS IN LAHOUL, WESTERN TIBET. *By Walter Asboe.*

90 The peasants in Western Tibet are in the main agriculturalists, though on the high plateaus of that country (14,000 to 16,000 feet above sea level), there are to be found large tribes of nomads who follow a purely pastoral occupation.

Whilst both men and women engage in field work, it is the latter sex upon whom the burden of farming really rests. The share of agricultural pursuits which falls to the male sex consists of building walls and repairing them, sowing, ploughing, repairing watercourses, building corn stacks, and assisting at the threshing operations.

The women on the other hand are so fully employed in the running of the farms that they have little leisure for pilgrimages to sacred shrines, or visits to far distant relations. The men folk in Lahoul occupy their time during the summer months in wool trading, and travelling hither and thither with merchandise.

The farm duties of the female sex are the carrying and spreading of manure on the fields in spring and autumn, harrowing or beating the clods of earth in the wake of the ploughmen, making ridges in parallel or oblique lines over the fields to render irrigation easier, placing stones, sticking stones in the ground vertically for diverting the water during the process of watering, weeding, once, when the first blades of barley or wheat appear above the ground, and again, when the ears have formed, and it is easy to pluck out the long weeds with the hands.

Irrigation, reaping, threshing, winnowing and carrying in of the crops are performed by the women, with occasional help from the men when such are available.

In Lahoul, where the snowfall in winter is heavy, the time for beginning agricultural operations varies slightly each year, though the middle of April is usually the time when farm work is contemplated.

The various occupations of the agriculturalist

in Western Tibet, in the order in which they occur from April until December are :—

1. Wall building and repairing breaches.
2. Cutting new watercourses, and repairs to old ones.
3. Planting of willow saplings.
4. Collecting of thorns for hedging fields.
5. Carrying out and spreading manure on fields.
6. Sowing and ploughing.
7. The ceremony of blessing the fields.
8. Beating straw for straw shoes : this done by the women.
9. Mud washing and general spring-cleaning of the houses.
10. Watering grass land.
11. Weeding with small hoe (*surmo*).
12. Irrigating the fields.
13. Beating straw for straw shoes (this, during a slack time).
14. Cutting the grass and storing it on house roofs.
15. Reaping the grain fields.
16. Building corn stacks.
17. Threshing.
18. Winnowing.
19. Carrying out and spreading manure on fields.
20. Collecting wood for the winter fuel.
21. Milling grain for the winter supply.

From December until spring farming pursuits cease, owing to the heavy snowfall, and the population engages in village social functions, spinning and weaving of yarn for clothes.

Lahoul being under British administration, the acquirement and disposal of land are regulated in accordance with Government rules. Similarly in Ladakh, another district of Western Tibet, the people are subject to the revenue regulations of the native State of Kashmir.

Although in certain parts of Western Tibet the people do not engage in any agricultural enterprise

before a verdict as to the propitious moment for beginning such occupations is given by the hierarchy, this custom is considerably relaxed in Lahoul, where the community does not pay so much attention to the priestly oracle as do the people living in the more remote valleys of Western Tibet.

Landmarks.

Rocks, stones and watercourses serve as landmarks to distinguish between the various farm holdings. When disputes occur, arising out of the removing of rock or stone landmarks, a subordinate in the Government survey department is called in to remeasure the land which is under dispute, and legal proceedings are taken by the offended party.

Virgin Soil.

When a farmer contemplates cultivating virgin soil, he has first of all to consult the wishes of the community, lest he should infringe the rights of communal pasturage, before negotiating with the Government authorities under whose administration he lives. If the community is agreed that there is no encroachment on the pasturage, a beer drinking party for all concerned is arranged at the expense of the farmer, who may then proceed to acquire the prospective piece of waste land from the Government.

Regulation of Water Supply.

An adequate supply of water from rivers, glaciers and accumulations of snow is essential in a practically rainless country such as Western Tibet is. Hence the community is most jealous in protecting its rights over such water supply. Two men (Las-pa) are chosen in rotation yearly by the villagers to supervise the communal water supply.

Their duties consist of (1) calling the villagers when the watercourse has to be repaired, (2) collecting beer from each household for the nourishment of about 14 people engaged in the repairs.

In Ladakh the watchers of the water supply are called 'Choo-spon' (lit. Master of the water supply). In cases where there is a communal reservoir for collecting water for the fields, the 'Choo-spons' (usually two or three men) allot the amount of water for each farmstead, and so prevent the possibility of one farmer stealing more water than is his rightful share.

Arrangement of Fields.

Owing to the mountainous nature of the

country, the fields are arranged in terraces, and irrigated by watercourses cut in fan-like formation from a river, mountain torrent, or from glaciers and large accumulations of snow.

Size of a Farmstead.

The extent of a man's fields is popularly computed in terms of a yoke of oxen (dzo-ldor), or in a dry measure called a 'Kal' (40 lb.) of seed. Thus if one asks a peasant how large is his arable land, he will reply that he possesses land sufficient to plough with one or two yoke of oxen (dzo-ldor) as the case may be, or he may say that his land requires 2 'Kals' (80 lb.) of seed to sow it. It takes one yoke of oxen to plough a field requiring 1 kal of seed to sow it. Computed in terms of Indian survey measurement, this extent of land would be two 'bigars.'

The average amount of land possessed by a single farmer is that which can be ploughed by one yoke of oxen in four days, therefore requiring 4 kals (160 lb.) of seed. The average yield in a good year for each kal of seed sown is tenfold.

Lha-zhing (Field belonging to a God).

Dispersed throughout the country are fields which from ancient times belong to a local god (Lha-zhing). These are cultivated by the peasants who, at the Buddhist new year (February), and again in May when ploughing begins, have to regale the bearer of the wood image of that god with beer and one measure of barley. The cultivator of these fields may, however, reserve the harvest for his own use.

Alternation of Crops.

Barley is sown two years successively, and the land is manured on the previous autumn or spring. On the third year a crop of wheat is grown, the land being similarly treated with manure. On the fourth year buckwheat is sown, but this does not require manure. Then on the fifth year barley is again sown, and so on.

Barley, wheat and buckwheat have been grown for an indefinitely long time, and are indigenous crops, but during the past fifty years rye has been cultivated with marked success. This was introduced by the Moravian mission operating in this country, as also were potatoes, vegetables and fruit trees.

Sometimes an insect destroys the barley soon after it is sown, in which case the people water the unproductive field and then sow more seed by loosening the soil with a small implement like a hoe with a short handle (surmo).

A Second Crop.

In recent years the peasants have shown considerable enterprise by sowing two crops in a year, the first being that of barley, followed by a crop of buckwheat.

How Grass and Straw are sold.

When selling grass, the peasant disposes of it at the rate of one rupee per two 'martacks' (a martack being a load of grass which can be enclosed by a leather rope 24 cubits in length). Similarly, straw is sold by the martack, but in order to carry this load it is necessary to use two ropes of 24 cubits length, and adjust them so as to form a sort of net. Three of these loads of straw can be bought for a rupee.

Method of Sowing.

The seed is first scattered over the field and then ploughed in with a light plough which can easily be carried on one's shoulder. The plough is drawn by *dzos* (male hybrid of a yak and a cow), whereas in other parts of Tibet the seed is thrown into the furrows.

Occasionally a harrow made of thorns tied together is drawn across the ploughed field by *dzos*, though the usual practice is to beat the clods of earth with mattocks.

Letting Land.

It often happens that a farmer will let his land to another, because he is too short-handed to cultivate it himself, or because he contemplates a trading expedition into the interior of Tibet. The arrangement that is made therefore is that the tenant receives half the crop in return for seeding, the seed being supplied by the tenant, ploughing, irrigating, weeding, threshing and winnowing the crop, whilst the landowner pays the revenue and the cost of repairing and watching the watercourse supplying the field with water.

Rusta (Inula Helenium).

Of late years the peasants have engaged energetically in the development of a spicy root called *Rusta* (*Inula Helenium*). This root was originally smuggled into the country from the Kashmir State which has the monopoly of *Rusta*. It is readily grown and, when matured, dried and sold, yields a handsome profit, its cost price being about Rs. 2 and 8 annas per lb.

Exchange of Labour.

As most transactions between the peasants are conducted by way of exchange in goods or labour, little money is passed from hand to hand.

For instance, if a farmer requires three or four

men or women to assist him in working his fields for a given number of days, he must on a subsequent occasion supply the equivalent in man power when called upon to do so.

The Farm Servant (Len-mi).

The more opulent farmers keep one or more men or women as permanent servants. These are employed from spring until autumn, their remuneration consisting of one piece of homespun cloth sufficient to make an outer garment, board and lodging, and a payment of 12 rupees at the expiration of their period of service. If the servant be a male, his allowance is the same as that given to a woman, with the exception that he receives double that amount of money (*i.e.*, 24 rupees). In some cases, however, the payment is entirely in kind.

Village Shepherds (Lug-rdzi).

Each village employs three shepherds to pasture the communal flocks. These shepherds have, however, to perform subsidiary duties, such as assisting each householder in building or repairing walls round the fields, ploughing and threshing.

When the harvest is gathered in, the shepherds make a house to house collection of barley and buckwheat. In addition to this they receive one fifth of the produce of wool from the communal flocks, which is divided amongst them equally.

Loans in Grain.

Many of the monastic institutions in Western Tibet are very wealthy and increase their income by negotiating loans of grain to the poorer peasants, taking interest at the rate of five measures for each *kal* of grain lent (*i.e.*, 10 lb. of grain for every 40 lb. lent, *viz.*, 25 per cent.). The result of this extortionate rate of interest is to put the poor farmer entirely in the hands of the priesthood, and rob him of every chance of increasing his annual output of crops through acquiring new farm implements or improving his land in other ways.

Manufacture of Beer.

The consumption of locally brewed beer from barley is very considerable, for at least one third of the annual yield of barley is converted into this liquor. Whilst it is difficult to estimate the exact quantity of barley used for the manufacture of beer, the average would be roughly 20 *kals* of barley per household (800 lb.) This means that the Lahouli has to import large quantities of

grain from Kulu, a neighbouring state. Thus the wholesale manufacture of beer from locally-grown produce has an economic significance as serious as it is unwise.

The Cure of Livestock.

The people are on the whole kind to their animals and feed them as well as they are able with the limited yield of fodder at their disposal.

From December until April, the heavy snowfall in Lahoul precludes the possibility of grazing cattle. The animals have therefore to be housed on the ground floor of the houses. They are never bedded as in western countries.

When the supply of hay is exhausted the cattle are fed entirely on straw, this being again supplemented in the spring by the bark of willow branches cut and thrown into the pen to be peeled off by the sheep, goats and cows.

The willow tree is extensively cultivated owing to its use both for fodder and fuel.

It is customary for a peasant with more cattle than he can conveniently feed, to hand his surplus livestock to a neighbour to keep and feed from December to April, the price for the cattle thus treated being three rupees per head, and four or

five rupees per pony. Provided that the farmer has sufficient fodder to feed his own and his neighbour's cattle, he is glad to get the extra heads in order to increase his supply of manure.

Conclusion.

Though the total yield of crops is meagre, as is to be expected in high altitudes and in a practically rainless country, the farmer gets as much out of the land as can well be expected.

Generally speaking he is very poor, and the prospect of famine is never far removed from him. Were it not for the wool trade carried on between the highlands of Tibet and Lahoul, by way of supplementing the slender harvest he reaps, the Lahouli would be far worse off economically.

He does not take kindly to improved methods of agriculture, owing to the conservative attitude of the community as a whole.

The slow penetration of western civilization is, however, leading to a slight increase in agricultural activity, in that Lahoulis are now beginning to open up virgin soil which has lain uncultivated for centuries.

At best the struggle for existence in so elevated a region as Lahoul is a real and stern one.

Nigeria.

BUSSA REGALIA. By D. F. Heath, Assistant District Commissioner, Borgu Division, Lower Provinces, Nigeria. Illustrated.

91 The story of Kisra,¹ the almost mythical hero and ancestor of the Borgu chiefs, has been told in many places and with many embellishments, but a description of the Kisra regalia—heirlooms through the years of the chiefs of Bussa—does not appear to have been recorded. The following account—inadequate, for reasons that appear later, as it is—is an attempt to rectify the omission.

THE KISRA BIG DRUM (*Gangan Kisra*).

The most revered heirloom, though known as the big drum of Kisra, is not one of his original possessions. It is the successor to the big wooden drum handed by Kisra himself to the people of Kwakwa, a small island near the old capital, Tsofon Bussa. As has been related, when Kisra and his following came to these parts he found already here a sparse population, and settled peaceably among them.² "Two stipu-

¹ For the Borgu version *vide* 'Gazetteer of Ilorin Province' by the Honourable H. B. Hermon Hodge. Page 115 *et seq.*

² Gazetteer, page 119.

lations were made, first religious freedom for all, and secondly that all dead chiefs and their sons should be buried by the original inhabitants." The Kisra Big Drum is intimately connected with the burial rites of the Sarkin Bussa, and hence its guardians are those original inhabitants.

The Drum must never spend a night away from Kwakwa Island. It is brought to the capital twice a year on the occasions of the 'big' and 'small' festivals, when it is beaten at the close of the ceremony as the 'Amen' when the Sarki returns to his residence. Its second use is at the death of the Chief when it is beaten steadily throughout the digging of the grave and for the duration of the funeral rites.

Being wooden, renewals and repairs have been necessary throughout the years, and none of the original drum now remains. Its spirit, however, and therefore its power and sacred character is unchanged. Such is the potency of this power that on its journeys to and from Bussa everybody must give it a clear road.

Heath.

District Commissioner, Borgu Division, Lower

Were any person to be foolhardy enough to meet with it, or even catch a glimpse of it in these circumstances, that person would not live to see another harvest. The photograph (fig. 1, *below*)



FIG. 1. THE KISRA KETTLEDRUMS.

shows only the shell of the drum. It was brought to Bussa to be photographed, but as the occasion was an 'inofficial' one it was not properly prepared or covered.

THE KISRA KETTLEDRUMS.

In a special hut behind the mosque—(it is noteworthy how very intimately the pagan superstitions and religion are bound up with the superimposed Muslim faith)—the two large copper camel drums of Kisra are kept (fig. 1, *above*). They are obviously of great antiquity, and the thin copper is worn into large holes in both. These drums again are used regularly twice a year, once at the feast of 'Kisimi' and once at the feast of Ramadan ('Leperu' in Bussanchi). They have special keepers, who in former times had to be slaves captured in war. Every year fresh slaves had to be obtained—the potency of the drums was such that none saw the year out after having beaten them. These drummers died natural deaths, but one supposes that their demise must have been helped by human agencies at times. For, although the coming of the British Administration has, according to popular tradition, demonstrably been responsible for the fading of the power of the old-time directional spirits, yet, since our rule has been imposed, there has

been no death amongst the keepers of the kettle-drums! Of course, under British rule, a supply of slaves captured in war is not easy to keep up, but one is assured that expediency has no part in the paucity of deaths among the Kisra drummers.

THE SPEARS.

There are seventeen of these (figs. 2-4) kept tied together, the heads enclosed in a brass cylindrical container which is capped by a quadrate on a thin neck. This cylinder (fig. 3) is of special interest. Judicial oaths in extreme cases, but more especially oaths of allegiance, are taken on it. The Sarki, holding the case in his left hand, calls upon the names of his forefathers to bear witness and, taking a pinch of dust from where his foot has trodden, places this with some water in the cylinder and gives the portion to the swearer to drink. False swearing to a fact, or disloyalty in word or deed if the general oath of allegiance has been taken, will kill within the year.

The spears themselves are of two kinds. There are nine wands (fig. 2) with tapering ferrule



FIG. 2. THE SPEARS AND CONTAINER.

heads of metal, seven of brass, and two of iron. The heads are intricately engraved with small circles and squares, and are known as the 'Sandagoro,' and their shape suggests a possible phallic significance. The remaining eight (fig. 4) have long pointed iron heads rather like the



FIG. 3. SPEAR CONTAINER.



FIG. 4. IRON SPEAR HEADS.

ordinary fish spear, but without the barb, and are called the 'Masu Rawan Gani.' All are the especial care of the Berisoni, or chief guardian of the regalia.

On ceremonial occasions, and in war, the keeper of the spears always precedes the Sarki, carrying them in their case, on his left shoulder at the 'order.' The keeper feels neither cold nor heat, nor hunger nor thirst while thus employed. The spears must never be placed or rested on the ground until the close of operations, be it feast or war. Both before and after touching them the keeper must perform specified ceremonial ablutions. In battle, with the spears thus carried ahead of him, the Sarki is invincible. Foemen within striking distance are themselves struck with paralysis. Bullets fall harmlessly to the ground.

The iron spears alone are used by the Sarki himself on the occasion of the 'Gani seven-day' feast.

It has seemed strange to me that, in spite of looking for it, I have been unable to find any

connexion between the probable phallic symbolism of the 'Sandagoro' and any fertility cult. Apart from giving a general order that farming may commence, the Sarki himself is subject to no special tabu, nor has he any special power in regard to the sowing, fertility or harvest of crops. And this is so in spite of his nominal headship of all the various magic cults. Again I think we must look to Mohammedanism for the explanation. The Bussa year is the Mohammedan one and by the grafting of the old pagan festivals on those of the Muslim religion they have probably lost the seasonal significance they once had.

THE BRASS BOWLS, ETC.

The uses and meanings of the remaining articles of the regalia (fig. 5) are now unfortunately lost in the limbo of the past. Such little as is still remembered is here recorded.

There are three brass eggs about the size of those of an ostrich. They are in two halves. One is nearly broken in pieces with age. The second contains seven strings of beads, which are worn by the 'bori'³ women dancers on the occasion of the Gani feast at the end of the year. The third egg contains eleven pebbles, said to have been brought by Kisra from the East. When he goes forth to war the Sarki takes these eleven pebbles in his pocket. Where the enemy presses hardest he will throw these stones, thereby causing the immediate triumph of his own people. No matter how many he throws, the stones miraculously reproduce themselves, and eleven, and eleven only, always remain.

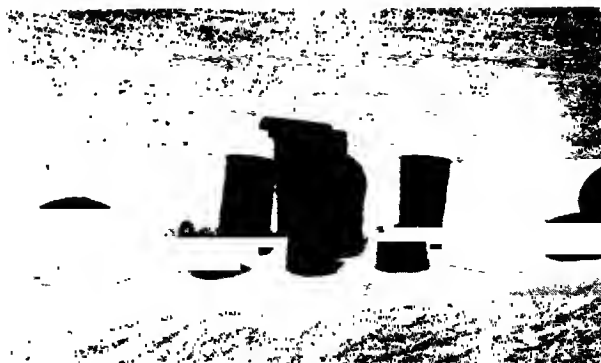


FIG. 5. BRASS BOWLS AND OTHER OBJECTS.

There is one finely worked filigree brass

³ 'Possessed' by a spirit. They become self-hypnotised in their dance.

sphere. in two halves. It is about seven inches in diameter. There are also two small half spheres of brass filigree work, each with a small loop handle. They remind one of a modern tea strainer and are about the same size. The Sarki remembers that in the time of his grandfather these bowls were set out at the time of the feasts and he thinks they contained kola nuts for the refreshment of the dancers.⁴

The two cylindrical brass stools, rather like very large cotton reels, were said to be used as seats for the 'bori' dancers. There is an alternative explanation that these seats were meant for the tutelary spirits present at the jollifications.

Among the articles with which the dancers themselves were adorned are five brass wristlets, three about six inches long and two about two and a-half inches in length; two very old black horse-hair fly whisks with brass worked handles; and a brass bell. There are five wild hog tusks, four of which are used to beat the small dancing drums, and the fifth is used to strike a small fragment of iron, which looks as if it were a piece of a broken armlet or gyve.

The accompanying photograph shows all the regalia to be in most dilapidated and dirty state. This is not due to neglect. They can only be ceremoniously cleaned once a year before the Gani feast, by worn-out wives of the Sarki—women who have passed the age of childbirth. To clean the articles at any other time or any other purpose would bring disaster upon the people of Bussa.

Mention must be made of the old chains of office belonging to the Beresoni. It has been stated that the chains and spears were buried when Kisra and his followers first arrived at Old Bussa.⁵ This does not appear to be quite correct. The spears were always kept in the Sarki's house, and the chains, after the annual festival, were always left in situ near the sacred rock of sacrifice in the bush by Old Bussa. One year in the time of the present chief's grandfather the chains could not be found, and they still remain hidden.

Modern additions to the heirlooms of the Bussa chiefs are the 'Mungo Park Ring,' and two brass kettle drums presented by Lord Lugard. The ring consists of a George III crown piece, said to have been presented to the Sarkin Bussa by Mungo Park when he stayed at Bussa on his last fatal voyage. It was taken to England and shewn at the British Empire Exhibition. The kettle drums were presented to the present Sarkin Bussa on his installation, and in actual fact the Sarki sets more store by these than on the whole of the original regalia. They will be known to posterity as the drums of Kitoro Gani, and his name will thus not be forgotten.

It is a matter for considerable regret that no early investigation of the Kisra heirlooms was made. At the beginning of the century men were alive here who could remember all the details of the past meanings and uses of all the regalia. To-day, time, the advanced age and decaying memory of the old chief, the strong influence of Mohammedanism to which reference has been made, and the deaths of the old office holders, have effaced the recollection of those religious meanings and uses. The office holders died while the old chief was in exile between 1915 and 1924. The Regent during those years was a strict Mohammedan and, even supposing that the sacerdotal mantle could be said to have fallen upon his shoulders during the lifetime of the rightful Sarki, he would have no part nor lot in any of the old pagan festivals or cults, and no new Beresoni was appointed.

The present Sarki, now well over seventy years of age, came to the throne in 1902. Up to this date he says that the regalia were in fairly constant use. Since then he himself in the very early days of his reign used them once. He has thought many times since his return to Bussa in 1924 of appointing a new Beresoni and trying to revive the glories of the past, but it is an expensive business, and he has put it off from year to year until to-day he quite frankly does not expect ever to be able to do so. The Kisra relics are treated with reverence and respect, but even the Sarki himself looks upon them as one with the traditions of his forefathers' six hundred wives and five thousand horses—pleasant to reflect upon, but of little practical use in these hard modern times.

⁴ A similar container is used by the Alafin of Oyo for ceremonial kola nuts.

⁵ Ilorin Gazetteer, page 118.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Religion and Sacrifices of the Zahau Chins.

92 *Summary of a Communication by Mr. H. N. C. Stevenson. 6 April, 1937.*

The outstanding features of Chin religious ideology are: (i) Belief in a spirit world inhabited by spirit-forms of humans and animals; (ii) belief in ancestor spirits; (iii) belief that social status on earth determines status in the next world.

These beliefs find expression in sacrifices to: (i) Personal spirits; (ii) household spirits; (iii) village spirits.

The first two categories are connected with the health and welfare of the individual and the household. The third takes place during the Feasts of Merit, and in the invocations made general prosperity is demanded and a promise given to continue the series of feasts.

The holding of the Feasts of Merit confers certain temporal advantages such as prestige, rights to share meal of meat, etc., membership of council.

Finally, completion of this series is one of the qualifications necessary for admission to the Chin paradise. The other qualifications are: the holding of the feasts of celebration of the taking of a head, and the killing of various species of wild animal.

The Feasts of Merit and of celebration are the basis of a system of economic exchanges between relatives and are used as a means of payment (through distribution of flesh) of dues to chiefs, priests and blacksmiths.

The lines of resistance to religious change can be analyzed in terms of the economic, political and kinship implications of Chin religious ritual.

Social Symbiosis and Tribal Organization.

93 *Summary of a Communication by Dr. S. F. Nadel. 20 April, 1937.*

Viktor Lebzelter. 1888-22 December, 1936.

95 Physical anthropology has recently lost several of its doyens—notably Karl Pearson, Giuseppe Sergi and Elliot Smith—and also several of its leaders in the following generation—notably Davidson Black and Akira Matsumura. The name of Viktor Lebzelter, who died on 22nd December last in his 48th year, must now be added to the latter group.

Lebzelter was widely known as the energetic Director of the Anthropological Department of the Natural History Museum in Vienna. The material in his charge comprised ethnographic and prehistoric specimens, including the magnificent Hallstatt remains, and a valuable collection of human skeletons. His chief interest was in these last. For more than twenty years he published, in spite

The concept of symbiosis defines in its original context, in Biology, "the permanent union between organisms each of which depends for its existence on the other." It seems a concept which could be fruitfully applied to social phenomena, in particular to the interdependence of social groups. This paper attempts to describe, under the aspect of social symbiosis, the specific social structure of a certain Nupe community in Northern Nigeria which grew out of the fusion of four originally independent and culturally distinct tribal groups. The development itself which led, ultimately, to such a symbiotic union belongs to a large extent to past history. But in some respects this development is not ended yet; it is, at any rate, visible in the social structure that obtains to-day.

We can trace the symbiotic development in the sphere of political organization, economics, religion and kinship structure. The quasi-biological approach to social life leads to a certain extent to a re-interpretation of such familiar and well-established principles of social organization as Clanship or Exogamy—a re-interpretation, that is, which conceives these forms of social integration and differentiation as specific varieties of social symbiosis.

Megalithic Monuments. *Boyle Somerville Manuscripts.* (Cf. MAN, 1937, 78.)

94 Some misunderstanding having arisen through the use of the word *orientation* in the second paragraph of the note in MAN for April, it seems desirable to state that it is intended to make the manuscripts of the late Vice-Admiral Boyle Somerville available to all who are interested in stone monuments.

OBITUARY.

of many difficulties, a continuous stream of papers in scientific journals. These were principally of an anthropometric character, and most of them dealt with series of living people and skulls of European and African origin. They were all careful pieces of work of enduring value, even if they are more likely to be consulted in the future for the sake of the descriptive records they contain than for illustrations of methods of interpretation. The publication of the sumptuously produced volume *Die Vorgeschichte in Süd und Südwestafrika* in 1930 showed that Lebzelter could write authoritatively on another subject. When in London in 1934, attending the International Congress, his vitality and bonhomie appeared unabated, and anthropology can ill afford to lose one whose work for the subject promised to be far from completed. G. M. M.

REVIEWS

ASIA

Les Paysans du Delta Tongkinois: Étude de Géographie Humaine. By Pierre Gourou. Paris, 1936. 666 pp., 48 pls., 125 figures. plans and maps in the text and 9 loose maps.

Esquisse d'une Étude de l'Habitation Annamite dans l'Annam Septentrional et Central du Than Hoa au Binh Dinh. By Pierre Gourou. Paris, 1936. 78 pp. 16 pls., and 34 figures, plans and maps in the text.

These are two of the always excellent, paper-bound publications issued by l'École Française d'Extrême-Orient. Both are by Dr. Pierre Gourd. The first volume, the weighty tome on the peasants of the Tongkin Delta, is divided into three parts. The first of these treats of the physical geography of the delta, comprising mountains and hills, the alluvial flats and their evolution, the climate, rivers and other waters, while the last chapter of the section is concerned with irrigation.

The second section is devoted to the discussion of the peasant population, dealing in this relation with the history of the peopling of the delta, place and family names, the density of the population with reference to the census of 1931, totals of the rural population and its density. Other subjects of which the author writes in the section are movements of the population as affected by increase, colonization of the interior and emigration, villages in connexion with concentration of population, habitat, elements of the village, village life and houses, with many details with regard to their construction, plans, etc., as well as some conclusions about them.

The third part is concerned with the means of existence of the peasants. Agriculture comes first and is described in several chapters and under a number of sub-headings, such as division of land, proprietors, communal land, land values, modes of tenure and credit, the agricultural calendar, agricultural technique, rice in various aspects, secondary cultivations, farm animals; while fishing in its different forms is also included under the section dealing with agriculture, the chapter on this subject also treating of fish culture, floating villages and the production of salt.

Village industries form another section of the part, these comprising textiles, the making of alimentary products, basketry, woodwork, lacquer and also the employments of sawyers, masons, brickmakers, lime-burners, makers of paper, jewellers, etc., etc. Other chapters are devoted to factors in the distribution of industries, the characteristics of peasant industries and trading. There is also a conclusion.

The plates and textual figures throughout the book are excellent, and especially the plates from aerial photographs showing villages and the arrangement of their houses with regard to one another, to the rivers, to the hillocks on which they sometimes stand and to their rice fields, also the arrangement of the rice fields themselves.

The text is followed by a long bibliography and indices of place-names and subjects; these again by lists of textual figures, plates and part and chapter contents.

It will be seen, therefore, how complete a guide this volume is to what may be called the outer life of the inhabitants of the Tongkin Delta. With regard to their inner life the information given is somewhat scanty, as might be expected from the sub-title of the book. Perhaps, at some future date, the author will provide us with more information in this connexion and thus complete his picture of the people. In the present volume only a little over two pages, under the heading of 'public edifices and religious acts,' are devoted almost solely to this purpose, but what little the author does tell us of the many different cults that exist makes it clear that a rich field here awaits further cultivation. Sociology, too, deserves to be dealt with fully.

Some of the plates are specially interesting. One of these is that (XLII) of a potter at work at his wheel.

The rather large wheel is set—of course horizontally—almost level with the ground, into which the pivot is fixed, and is rotated by the foot of the potter. He sits slightly raised above the wheel, with legs one on either side of it, so that his right foot easily reaches its edge.

Other interesting pictures are those showing the use of a drop-net on a fulcrum, this being similar to that known to the Malays as *tangkul*, and an excellent aerial photograph of a village and rice fields which also illustrates dry terrace cultivation.

With regard to the letterpress attention may be drawn to the statement that little is known of the pre-history of the delta, lasting, the author says, at least to the second century A.D., excavations having only been undertaken in the mountainous regions. Such objects of polished stone as have been found in the lowlands have been obtained by peasants in the course of their labours.

Our author states, too, that when the Chinese arrived in the delta they probably found a population there formed of mingled Indonesian, Melanesian (or proto-Melanoid) and Negrito elements, already enriched with Mongoloid accretions. It was an organized people with a king and federal chiefs. Agriculture was known and hoes were used, but the art of employing animals for labour was not understood. The play of the tides was used for the irrigation of the rice fields.

Further on it is stated that the civilizing Chinese influence penetrated the country profoundly and the language became saturated with Chinese words, while preserving a Tai syntax, and Chinese characters were adopted easily since there had been no native script previously.

The smaller volume, that on the Annamite house, is equally as worthy of praise as the larger, though its scope is more restricted. Here again we have the same excellent plates, plans and textual figures. The last, consisting largely of sketches illustrating house architecture and methods of building, are clear and easy to understand. Among the plates, as in the other volume, are some taken from very fine aerial photographs and, though perhaps not so interesting from an ethnographical point of view, one may mention for its excellence Plate X, which depicts an Annamite fortified city and its environs, the plan of which was inspired by French fortifications of the end of the eighteenth century.

The author remarks that the Annamite house, being built of wood has only a limited life and the most ancient that he has seen did not exceed one hundred and fifty years. New houses are often of modified type, even when built more or less in the old style, but in some the carpentry is of European type or composite. All the more need, therefore, as the author points out, of this study of the true Annamite dwellings. In spite of the various kinds of truly native dwelling to be found there is, however, an underlying uniformity which lies in the disposition of the plan and in the structure of the dwelling. Everywhere the Annamite house, always built on the ground, consists of timber-work resting on pillars and supporting the roof. The walls play no role in the solidity of the house, serving merely for protection against the elements.

An interesting map is given on page 72 which shows the distribution of the different house types, of which the author distinguishes seven. Of the roofs of Bin Dinh he says that they give an impression, by their large size, of Indonesian influence, but this is one that he cannot confirm. The double roof of Bin Dinh is not reported among the Indonesian colonies of the Annamite mountain chain.

I. H. N. EVANS.

The Social Economy of The Himalayans. Based on a survey in the Himalayas. By S. D. Pant, M.A., LL.B., Ph.D. With a foreword by the Hon. Sir Edward Blunt. London: Allen & Unwin. 264 pp. Price 15s.

This study of the economic organization of the nomadic tribes inhabiting the Kumaon Himalayas is written with charm, and the subject is full of interest. Though mainly descriptive, theoretical issues and generalizations are not ignored, though one could wish for more. There are two distinct types of social organization. The Bhotiya, inhabiting the upper slopes bordering on Tibet, are nomadic traders, practising agriculture for five months of the year as a subsidiary occupation only, holding their wealth in the form of herds, which are not milked but used for their wool; the men always on the move, continually spinning as they march. They afford a striking comparison with the Almorans, in the lower valleys, wringing a livelihood from the soil by elaborate means, such as 'wet farming' in the valley bottoms, 'terracing' on the slopes, and forest devastation, or 'katil' agriculture on the steep mountain sides; and migrating once a year to the warmer foothills with their families. Thus among the Bhotiyas, the women, who must manage the camps alone, when the men are away on trading expeditions, are a self-reliant and respected part of the society; whereas the Almorans are the drudges of a community which has many dreary tasks to perform in the fields. They cannot sew, mend or make clothes, though their skill in the back-breaking task of transplanting the seedlings to the wet fields in the 'wet farming' operations is great. In contrast, the Bhotiya women have the monopoly of weaving, and have acquired great skill, the men only spinning.

In their attitudes to the forest, also, the Bhotiyas offer a striking contrast to the Almorans, determined by geographic and climatic factors. They religiously preserve the forest, as it checks the avalanches which are characteristic of the steep slopes and heavy rains. Unfortunately we are not told what is the authority which levies fines for tree-cutting, and decides when to replant. But we have a full analysis of the Almorans' custom of destroying the forest and sowing broadcast on the clearings. This practice is bad for afforestation policies, which for various reasons are very desirable. But the government is inconsistent in its policy, hampering the needy by forest reservations, while making new grants for cultivation to those who are really only the rich and grasping. There is a real problem of opposing interests here, which reminds one of that of the Baiga of Central India, who (as described by Mr. Verrier Elwin) are prohibited from cutting the forest, which for religious reasons is the only method of cultivation possible for them.

The description of the ritual singing and drumming to lighten the task of the wet farming operations done by the women is of great interest; and it is a pity that the ceremonies described at the end of the book were not linked up with the main analysis. The maps are rather disappointing: being too selective, they do not show clearly enough the geographical context of each subject.

ROSEMARY UPCOTT.

A Study of Ancient Ships of Japan. Part I: Floats.

98 By Shinji Nishimura. Tokyo: (Society of Naval Architects.) 1936. 10 + 7½ in. ix + 162 pp., with 33 figs., XIV plates and 1 distribution map.

A work on ancient Japanese water-transport by Professor S. Nishimura is always welcome if only for the artistic dress in which it appears. The present is no exception; it is a credit to Japanese taste and book-making and to the generosity of the Japanese Society of Naval Architects who sponsor it. As to the contents we have to pay a tribute to the author's industry in searching through masses of ancient Japanese, Korean and Chinese mythical literature for evidence in support

of his thesis that parallels to the archetypes of most forms of water-transport once existed in Japan. Whether we agree with his conclusions is a matter largely of opinion, for in many instances the evidence adduced has necessitated considerable philological juggling with obscure words and phrases in the old tales on which he relies.

According to the author's thesis, gourds or calabashes, tied around the waist, were the earliest form of water-transport in Japan and Korea and antedated the dugout canoe. From this simple device developed in time lattice rafts supported by numerous gourds, and these in turn were succeeded by an early form of wooden boat having gourds tied to the sides to prevent capsizing.

Much of the evidence brought forward is by no means satisfying. For example, on page 51, the presence of small glass models of calabashes in graves in Korea is given as evidence that "the ancient Korean has a custom of carrying *pak* or calabashes somewhere around their waist" and he presumes that it is reasonable to believe that they were used as floats. Inflated skins and earthenware tubs are also claimed as ancient Japanese methods of water-transport, but here, again, the evidence is of the flimsiest.

A good deal of attention is given to the world distribution of these water vehicles and an illustrative map is provided. From the omission on this of any indication of the use of inflated skins and pot floats in Europe and minor discrepancies elsewhere, it is evident that the author has not consulted the whole of the literature upon this subject; a notable omission is any reference to R. Trebitsch's important survey of *Fellboote und Schwimmsacke*. The illustrations when original are of considerable value; the neglect to acknowledge the sources of those borrowed is a habit to be deprecated.

The author is a fervent diffusionist. He argues that skin floats were invented as substitutes for gourd floats when the latter diffused northward from their home in the south of Asia—a good working hypothesis; less feasible are the statements that rafts supported by earthen pot floats were an improvement upon inflated skin rafts and supplanted the latter, and that gourds, inflated skins and earthen pots form an evolutionary sequence.

J. H.

Travels in Arabia Deserta. By Charles M. Doughty, with a new preface by the Author, Introduction by T. E. Lawrence, and all the Original Maps, Plans and Illustrations. 9 × 5½ inches. 1 + 623 and 690 pp. London: Jonathan Cape, Ltd., 1933. Price 18s.

In reprinting the complete and unabridged edition of the original two-volume edition as finally revised by the author, the publishers have earned the gratitude of all lovers of this great work. The two volumes are here bound together as one, though the page numbering and the index are retained as in the former two-volume edition; the print is good, the printing, maps and illustrations are clear and the price is most reasonable.

Among books that give valuable studies of peoples there is probably none that ranks with this classic, which has the desert wind blowing through its luminous pages. It is not only the masterpiece of a sympathetic and acute observer; it is also in its quaint way one of the literary treasures of the English language. Doughty's life with the Bedawi is too well known to students to need comment here; his courage and endurance are among the heroic achievements of science, and they give an intimacy to his descriptions that has rarely been equalled. The combination of literary genius and scientific observer is not too often realized, but no doubt something from the greatness of the subject infused itself into the writing of 'Arabia Deserta.'

H. J. F.

Iban or Sea Dayak Fabrics and their Patterns.

100 By Alfred C. Haddon and Laura E. Start. Cambridge, 1936. xv + 157 pp., frontispiece, xxxv plates and 32 figures in the text. Price 25s.

It is a pleasure to welcome this well-written, well-planned and well-produced volume and to see that Dr. Haddon is still among the workers. The drawings of designs and patterns by Miss Start are excellent, as are also her pictures of spinning and weaving apparatus. There is a useful vocabulary of native words used in the text which is to be found towards the end of the volume, as is also a full bibliography.

It is interesting to see, in the section on the Iban themselves, that Dr. Haddon doubts the correctness of the surmise put forward by Hose and McDougall that some 200 or 300 years ago Iban warriors were introduced into Borneo from Sumatra by Malay chiefs, though some Ibans, it was thought, had arrived at an earlier date. Our present authors suggest that "the Iban migration into Borneo may be regarded as an early wave of the movements that culminated in the Malay Empire." Failing much more definite proof of the recent Sumatran origin of the Iban than appears to exist, my own opinion agrees generally with theirs.

It is pointed out, in a later section, that though it is true that "the carvings and engravings of the male Iban show predominantly plant forms, and the textiles of the women predominantly animal forms," this does not support the idea, advanced by Hose and McDougall,

that Iban art has been influenced by the Mohammedanism of the Malays, for the Ibans are pagans, while, if the men have been influenced against the use of animal forms, why have not the women also rejected them? That is the question that our authors ask. As a matter of fact I, too, rather doubt the Mohammedan influence, but, if it did exist, perhaps the difference might be explained by the greater conservatism of the women.

As to the presence of some designs that are also to be found in Malay art, it is remarked that they may well be due to the supposed common ancestry of the Iban and the Malays. The decorative designs of the Iban, it is stated, "are not only markedly different from those of other Bornean peoples, but equally so from those of the Malay, and almost all are intimately connected with their environment, pursuits or beliefs."

It is considered that "the traditional designs used by Iban women in their textiles have been developed since the Iban became separated from other peoples, and thus the designs would be a native art peculiar to the Iban." It is thought unlikely that they could have developed their high technique in such matters in a period of less than three centuries, that being about the time, according to Hose, that they have been resident in Borneo.

The section on the zoomorphic designs and their often magical significance, is especially interesting, many of them being highly conventionalized representations of omen animals. I. H. N. E.

RELIGION.**Aftermath: A Supplement to the Golden Bough.**

101 By Sir J. G. Frazer. London. Macmillan, 1936. xc + 494 pp.

The Golden Bough, as it is called by the reverent, has put forth yet another shoot, so vigorous as to suggest that that giant tree contains its author's external soul and by its flourishing condition helps to account for Sir James' seeming immunity from the ravages of time. The 75 chapters, long and short, which this book contains, are full of new material (a little had been used before, in the commentary on Ovid's *Fasts*), and are as fresh in style as of old. Controversial matter is, on the whole, avoided; theories, already argued for, being not so much assumed as used for pegs on which to hang the additional examples. For example, some instances of hearth-ritual, in Chapter XII, bear the caption 'Father Jove and Mother Vesta,' but add no new arguments for the hazardous hypothesis which, in the main work, is given that title. The longest sections are, naturally, devoted to matters which are fundamental to the author's views. Thus, there are 67 pages dealing with magic of various types; 91 on sundry totes connected with divine kings; 24 on 'The Perils of the Soul,' and 62 on tabus. But other topics are well represented, such as the story of the Fairy Bride (it might have been added that it is quite common in Modern Greek tradition, the bride being a *Neraïdha*; the reviewer hopes later to publish some interesting examples), certain astronomical beliefs and primitive observations, and much else. We know that, if no information on an anthropological subject is to be found in any other book available, it is probably lurking somewhere in the *Golden Bough*, and can be hunted out by means of the index; this resource is now likely to be more popular than ever. Indeed, in the whole volume there are but two items which could be spared: one is a piece of out-of-date etymologizing from Max Müller (Chapter XVII), the other a rubbishy account by a

tourist of the habits of the Valovale of South Africa (Chapter XLI), so manifestly worthless hearsay that it is surprising to find it in such good company, even with the cautionary words which introduce it. Inaccurate statements of Sir James' own are rare, even for him. On p. 368 a custom is said to be ancient Greek which is testified only for Naxos, and implied to be strange and unexampled, see Kallimachos, *Aitia*, ii, 1, 1 sqq. (Mair's numbering, in the Loeb edition); I have found nothing else worth drawing attention to in this respect. Omissions in the literature are rare, but not quite absent. To the mention of King Aun of Uppsala on p. 331 might have been added a reference to S. Eitrem's handling of the story, in *Festskrift til H. Falk*, Oslo, 1927. The account of fire-walking on p. 457 sq. might have mentioned the latest account by scientifically trained observers, that by Purves-Stewart and Waterston in *B.M.J.*, 1935, p. 1267 (Dec. 28).

Of parallels useful to those studying some special field there are very many. P. 66 cites, from Loango, an example of a quite rare thing, a curse which need not be uttered, even in a whisper, but will act if merely thought. Of more immediate appeal to those who, like the reviewer, are interested in the beliefs and customs of classical antiquity are the following: P. 14 describes a ceremony (from Baluchistan) having much in common with the Roman Robigalia. P. 63 mentions that in New Guinea a person who has been sitting down is careful to remove all traces his body has left on the ground. So they did in fifth-century Athens, though they had forgotten why: see Aristophanes, *Clouds*, 976. On p. 73, but for the mention of Oraons, not southern Italians, we might be reading a paraphrase of Petronius, 44, 18, in the description of the rain-making ceremony. P. 335 suggests that the theory ridiculed by Lucretius (v. 973, see Munro's note) concerning the alleged terror of primitive man that the sun once set, would not rise again, is not so foolish as he thought it. On p. 436, the

sound doctrine that ceremonials originally occasional may become periodic could be illustrated by the relation between the Ionian and Athenian *φάρμακοί*, scapegoats who were used, in the former district in time of distress, in the latter every year.

But each specialist will soon compile his own list of helpful passages in this new addition to the indispensable books in our libraries.

H. J. ROSE.

Religion and History. By James Clark McKerrow. London: Longmans, Green & Co., 1934. 193 pp. 6s. net.

102

These two essays have a unity only in so far as the first is a sociological study dealing with religious history from a secular standpoint, and the second is an attempt to expound secular history in terms of religion. The work would have been of more interest to anthropologists if the treatment of religious development had not been confined to the rise of Christianity. What Mr. McKerrow has to say, however, about the evolution of society and economic structure is quite worthy of consideration.

E. O. J.

Mythos und Religionswissenschaft. P. W. Schmidt's "Methodologisches" Untersucht auf Wurzelkrankheit. By J. Winthuis. Moosburg (Oberbairn): im Selbstverlag des Verfassers, 1936. iii + 161 pp., paper. RM. 2.50.

This monograph and the whole controversy to which it belongs are of the most painful nature, the more so as they seem to be occupying the valuable time of a renowned theorist and an able field-worker. Winthuis has published several works which have not met with the approval of the Schmidtian school and consequently have been adversely, not to say savagely, reviewed in *Anthropos*. He replies in kind. Besides a charge of deliberate suppression of scientific documents for totally non-scientific reasons—such a charge as might, in this country, mean either a suit for libel or the retirement from scientific circles of the person attacked—he takes up, in half a dozen sections, the various symptoms of the 'radical disease' which afflicts Schmidt and his followers, going into minute details of criticism and counter-criticism and indulging at times in niggling and pedantic word-baiting. When all allowance is made for provocation (and that seems certainly to have existed), this is not the tone in which a controversy is carried on in the modern scientific world, but savours rather of the political debates of Messrs. Pott and Slurk and their successors.

If we look beneath the cloud of words with which both sides darken counsel, the following points emerge. Winthuis spent some years in acquainting himself thoroughly, not only with the language and customs,

but with the intimate thought of a Melanesian people, the Gunantuna. He therefore feels sufficiently versed in 'primitive mentality' to pronounce upon the inner meaning of the imagery, verbal and other, employed by backward populations elsewhere, notably in Australia, and his interpretation of their ideas and aspirations is, that they all believe in a supreme deity who is bisexual, and aspire to regain what their mythical ancestors had, some kind of identification with this being. Clearly this high god differs from the Schmidtian pattern, especially in the strong insistence upon sex, which it would be an exaggeration to say that Winthuis finds everywhere and Schmidt nowhere, but an exaggeration of a fact.

If we ask on which side the truth lies, an impartial observer will note that Winthuis scores several important points. It can hardly be doubted that he is right in asserting that a good deal of the mythical language, ritual gestures and so forth of comparatively primitive peoples have for their users more or less esoteric meaning, which they are slow to reveal to the inquisitive white. That sexuality is a prominent feature of their thought is likewise hardly deniable; it is conspicuous in the minds and actions of any human group or stratum cut off from the varied intellectual and artistic activities of the more educated and advanced. The lower quarters of our own towns furnish examples enough of this, without going to Australia or the South Seas. It is true also that a man who has acquainted himself with the mentality of one backward people is at least a step nearer understanding that of another, in short of 'thinking black,' than one whose whole experience is restricted to books and to the society of cultured Europeans.

But that there is a single 'primitive' fashion of thought, and not rather as many fashions as there are peoples, even though they may resemble each other more than any of them resembles ours, is as unlikely as that that dull little phantom, conjured up by inferior educationists and labelled 'the child,' has any existence in schools where real children are taught, or mistaught. Finally, Winthuis's 'high gods' share with Schmidt's the defect of being much too theological in their nature, and, like them, are open to the suspicion of having had read into them, however unconsciously, the predilections of their discoverers for a systematic and self-consistent deity, whether edifying or not.

On one head, at least, however, the reviewer would agree most heartily with Winthuis. The time is not yet ripe, as he properly insists (p. 113), for any system of the history of culture so elaborate as Schmidt's own. We must first know a great deal more of the lower cultures from their own points of view. But the way to advance our knowledge is not by such thrashing of chopped straw as results from a controversy too long and too acrimoniously continued.

H. J. ROSE.

PSYCHOLOGY.

The Natural History of Mind. By A. D. Ritchie. London: Longmans, Green & Co., 1936. 8s. viii + 286 pp. Price 15s.

104

This book consists of the Tarner lectures delivered in Trinity College, Cambridge, 1935, with much added matter. The first three chapters are concerned with general considerations of physics and biology; the following two with physiology of the nervous system and the functions of the brain; next is a chapter on psychology and lastly two chapters which provide an opportunity for dealing with the sense of perceptions and cognition.

There are many aphorisms in the book. "Physiology

" deals with the materials of which the house is built. " . . . Psychology is the study of the architecture, . . . " or it ought to be." "Descartes had no business to " say 'I think, therefore, I am,' before he told us " what he was thinking about." "I have linked " together the feeling of unity and causality because " I believe they are very closely connected, in fact, " though, of course, logically the ideas are quite " distinct." "The term introspection is sometimes " used to mean simply the inspection of mental images." "Are the Behaviourists right? All the information " that can be got from dogs salivating and rats running " in mazes does not make up for neglecting the way

"in which men behave towards their fellow men." "The therapist who sees only the abnormal forgets what the normal is like." "All psychological theories are metaphors, as perhaps Freud has intended to hint by his use of Greek myths." "Homer clearly knew a great deal of psychology (more, I suspect, than most modern litterateurs) and was quite ignorant of physics."

The author puts the essential ideas of Freud on a sound basis and discards the premises of his disciples. In view of the difficulty of dealing with such a multiplicity of subjects, particularly the combination of physiological and psychological problems, the writer has made a very real attempt to co-ordinate them in a scientific manner. At times Mr. Ritchie indulges in brilliant satire, but only when necessary to emphasize an important point and this serves to stimulate the interest of the reader in a work which is most enlightening. This book, which gives a true perspective of physiology and psychology, has a workable index and the many references are clearly indicated. It should be read by all those interested in the study of anthropology.

E. J. B.

The Hero : A Study in Tradition, Myth and Drama.

By Lord Raglan. London : Methuen, 1936. 311 pp. 10s. 6d. net.

In this provocative volume, the main thesis of which was put forward in the Presidential Address to the Anthropological Section of the British Association in 1933, Lord Raglan follows up his analysis of the *Œdipus* story, published under the title of *Jocasta's Crime*, with a study of the place occupied by the Hero in myth and ritual. Anthropologists are now familiar with the author's contention that the traditional narrative, in all its forms, is devoid of any historical basis, being derived in every case from dramatic ritual or ritual drama.

The evidence produced in support of this hypothesis is arranged under three general headings—tradition, myth and drama. In the first of these sections, the basis of history is examined with a view to showing that only the smallest fraction of the human race has, or ever had, a natural interest in historical facts and the ability to transmit them to future generations. Educated people in their study of history are inspired for the most part with a desire to find an explanation of the present and an indication of the future, while the savage is only concerned with the past in so far as traditional lore is utilitarian. He has no inducement to transmit bygone events and no machinery by means of which their memory could be perpetuated.

Traditional stories are really myths, and myth, it is

contended, is ritual projected back into the past not as the record of historical occurrences, but as an explanation of the things done by a divine king or hero told in narrative form. The central figure is never a real individual, and the incidents described are wholly miraculous and mythical when subtracted from the divine person concerned. From a study of his own ancestry, Lord Raglan concludes that a hundred and fifty years represent the maximum time that events not recorded in writing can be remembered, and in the chapter on the traditional pedigree, a part of which has been printed as an article in the *National Review* (December, 1933), he maintains that no genuine English descents go back to the period of the Norman Conquest. A series of famous legendary figures are next examined—Robin Hood, King Arthur, Hengist and Horsa, and Cuchulainn—and relegated to the realms of pure mythology in company with the tale of Troy and similar traditions of other lands.

Having disposed of the historicity of tradition, Lord Raglan discusses the genesis of myth, together with the relation of the myth and the folk-tale with ritual. In this section he is at pains to show that the folk-tale is never of popular origin. The literature of the folk, he maintains, is not of their own production, but transmitted from the ruling or literary section of the community. Hence the reason why the hero is invariably a king, princess or divine being, who in the original ritual drama played the leading rôle in a royal and priestly capacity. As is truly said, the vast amount of traditional material dealing with the kingship in village festivals, songs, dances and stories, must have evolved among people to whom the royal ritual was not merely highly important, but thoroughly familiar.

In this and the following section, which deals with the ritual drama, Lord Raglan has much to say that is very significant, and critics of his earlier contentions should give full weight to the evidence he produces in these later sections. Recent investigation has brought into prominence the pattern of myth and ritual which centres in the things done to and by the king to secure the prosperity of the community, there is adequate reason to regard the mystery cultus and its associated ritual as dramatic in origin. This is clearly demonstrated in this volume. Lord Raglan is admittedly iconoclastic in his treatment of widely accepted hypotheses, but he is no earping critic, and he knows how to marshal his forces with scientific skill. Realizing where the weakest points in the defence lie, he goes straight to the attack, and whether he succeeds or fails, he leaves his mark. An author who makes us reconsider our established positions, is one who has not written in vain.

E. O. JAMES.

PHYSICAL ANTHROPOLOGY.

Vollblutneger und Halbwerge. By Paul Schebesta. Salzburg-Leipzig, 1934. 263 pp., 101 illustrations, 3 maps.

In 'Bambuti' which was published some two years ago, F. Schebesta described the Pygmy tribes of the Congo forest. The present book deals chiefly with the Negro tribes and the groups of Semi-Pygms (*Halbwerge*) which inhabit the forest zone of Congo and Ituri. It includes also some of the adjoining grassland tribes such as the Bantu herdsmen of Ruanda and of the country west of Lake Albert. The book presents its anthropological data in a somewhat inconspicuous fashion namely in form of a rather popular, coherent account of the author's travels into which are inserted the scientific observations proper. But this account contains a wealth of material. The author has visited a large number of tribes, and has analyzed their culture as fully

as this type of expedition would allow. Some aspects of the culture are dealt with really exhaustively, yielding most valuable informations about the social structure of these little known primitive forest dwellers. There is, for instance, the account of the powerful *Anyoto* society among the Babali, a typical secret society, which still holds its terrible sway over the native society, and which penetrates in an interesting way the tribal social and political organization. Valuable from another point of view is the attempt to classify, for the first time, all the various tribes in the Ituri forest according to racial and linguistic criteria, and to analyze the migrations and the general historical developments which appear to be responsible for the present stratification of culture (pp. 149-153). Finally also problems of culture contact and of colonial administration are tackled, though perhaps a little naively, here and there. If this most

valuable contribution to descriptive anthropology does not penetrate deeply into theoretical problems. It gives us the fascinating picture of a native people as it really lives, supported by excellent illustrations.

S. F. NADEL.

Rassenkundliche Untersuchungen an Albanern: Ein Beitrag zum Problem der dinarischen Rasse. By Joseph Weninger. (*Rudolf Pöchs Nachlass, Serie A, IV Band.*) Wien, 1934. 67 pp., plates, tables, bibliography. Price R.M. 18.

This is a very clear account of an extremely careful and exhaustive study of racial types among the living Albanians. The author made a long series of measurements on 95 individuals, and each measurement and index is discussed separately, together with the comparative material. This exposition is followed by a discussion of the possible groupings of the material.

All the statistical constants are worked out. The grouping is based on correlation and contingency tables. The whole work is accompanied by excellent photographs of the various types, beautifully reproduced. The photographs are documented by the actual measurements of the individuals and a statement of the type to which in the opinion of the author they belong. There is a short but useful bibliography. The monograph is one on which extreme care has been spent and it is likely to be of considerable value in elucidating the rather vexed problem of the Dinaric Race. The author admits that his material is too small to admit a certain identification of the five types which he believes exist, but his method of exposition and of tabulation is so clear that not only is it easy to see where his material is comparable with other workers, but also, whether one agrees with him or not, to make full use of the material which he has collected.

L. H. D. BUXTON.

GENERAL.

Unsolved Problems in Science. By A. W. Haslett. London, 1935. xi + 317 pp. Price 7s. 6d.

108 This is the clearest and best exposition of the problems of modern science known to me. Out of the fourteen chapters, into which Mr. Haslett has divided his book, there are four in which I have first-hand knowledge of the subject-matter discussed, namely, Chapter VII, *The Origin of Man*; Chapter VIII, *The Beginning of Civilization*; Chapter IX, *Is Man a Machine?* Chapter X, *The Riddle of Sex*. In every one of these chapters I marvel over the intimate manner in which Mr. Haslett has mastered the facts concerned, the simple and easy style in which he expounds the present state of each problem and the sanity of his personal judgments. I feel confident

that what I have found to be true of the chapters which deal with subjects I am familiar with will prove to be true of those chapters which are concerned with subjects so much more abstruse in nature than any I have had to work at. These have to do with the origin of matter, of energy, of the Universe, the constitution of matter, weather forecasting, the shaping of the earth, the quantum theory, etc., in short, every department of Nature now being explored by men of science. It is dangerous to begin reading any of these chapters—there is such a temptation to go on. Anthropologists in particular and men of science in general are fortunate in having Mr. Haslett to serve as an interpreter between them and the great lay public. ARTHUR KEITH.

CORRESPONDENCE.

Baptism by Fire.

109 SIR,—The curse of human studies has been endless classifications, definitions, distinctions, till every single fact almost has become a category in itself. That is not science. Science consists in reducing the welter of facts to as few principles as possible. Every time we find a common denominator to two sets of facts we have made a step forward.

The section *Baptême du Feu*, in the article *Baptême*, in Vacant's *Dictionnaire de Théologie Catholique*, II, 355 ff., helps us to reduce baptism by water and the ritual use of fire to a common denominator.

The gist is that both have been long recognized as variants of one process, baptism, which imparts life, or a better life, by the application of an element (in the old sense of the word).

The details are as follows:—

(1) The disciples of Simon the Magus and others maintained that baptism by water is incomplete without the baptism of baptism by fire, basing themselves on Acts ii, 3. This fire however was only an apparition at the time of immersion.

(2) Some Gnostics used a real, man-made fire. They applied a red-hot iron to the ears of the baptized. This local application is known to us the world over as branding or scarification, and is a feature of initiation.

(3) The Bezpopovtchina sect of Russia practised total immersion in fire in order to purify themselves. That meant burning themselves to death, which they did wholesale.

(4) The Albigenses solved the problem of total immersion in fire without hurt to the neophyte by baptizing him surrounded by torches in a dark place. Their sectarian opponents suggested they might do it more thoroughly by burning them, and unkindly reminded

them of those who had undergone such a thorough baptism by being burnt at the stake.

(5) Origen and other Fathers believed in total immersion in fire, but after death. According to him Christ will plunge the dead in a river of fire (compare Phlegethon in the Greek Hades), even as John the Baptist plunged the living in the waters of Jordan. Those baptised with water will not require baptism by fire. The two rites are evidently conceived as alternatives.

In conclusion the application of water and the application of fire are regarded as interchangeable or complementary. They have the same purpose and differ only in the elements used. The nature of those elements naturally conditions the application: fire destroys, so that total immersion is impossible to the living who do not value consistency above their earthly lives. Fire-walkers come as near as possible to solving the problem of total immersion in fire without hurt; so near that it is considered miraculous, and so sensational. That is unfortunate, because it has fallen into the hands of journalists, and so has been lifted out of its context. It is not therefore generally realized that it is just one episode in a ritual of the usual pattern. Of course, inanimate things and dead bodies of men and animals can be freely immersed in fire, and so are.

The following categories, which are always treated separately in books, now become one only:—Toasting, scarification, throwing brands, burning heretics, cremation, burnt-offerings, fire-walking (see my *Progress of Man*, 117, 151, 158, 199).

This giving of life by fire is merely one variant of the process of life-giving. It differs from life-giving with water only on account of the different physical properties which make a complete identity of technique impossible. How nearly identical the techniques are in spite

of this difference in the elements will appear in the following parallel :—

LIFE-GIVING	
BY WATER.	BY FIRE.
Immersion	Cremation
	Burnt-offering
	Burning at the stake
	Fire-walking
Sprinkling	Toasting
Touching with water	Throwing brands
Drinking (Siam)	Scarification
	Fire-eating.

This last is well known to us as a circus trick, but in Lane's *Modern Egyptians* (Ch. xxv. and Index s.v. *Fire*), are instances of fire-eating as part of a serious ritual. I shall be glad to hear of it as a serious rite elsewhere.

We thus have a complete picture of the development of the ritual use of fire from a very well worked-out theory of vivifiers, of which fire is one of the most popular, down to mystic conceptions and mere metaphor. For when soldiers talk of the baptism of fire they are not repeating a brilliant poetic inspiration, but merely preserving the last degenerate vestige of a once living system of ideas of far-reaching consequences.

Here I must leave the reader to deal with other substances in the same way—blood, sand, oil, wood, sceptre, etc., etc. He can use Prof. M. A. Canney's *Givers of Life* for that purpose. Let him particularly note the alleged effects, whenever there is any information on this point. I am confident he will fail to find any fundamental difference between them. Such an inquiry inevitably leads to the conclusion I have already suggested in my *Progress of Man*, 144-163, that all ritual application of substances boil down to one process varied by three factors :—

(1) The properties of the substance, whether liquid or solid, edible or inedible, etc.

(2) The extent of the application, whether total or local, internal or external, etc.

(3) The character of the people, whether given to hysteria or not, whether sensitive to pain or insensitive, squeamish or the opposite (as in the case of cow-dung), etc.

Even the properties of the substances do not make all that difference. Gold is neither edible nor soluble, yet it is drunk in India and Siam. We have seen that even the painfully destructive nature of fire can be disregarded in mass hysteria. Still common-sense generally prevails over the rage for consistency, often by way of compromise, as in toasting as the next best to total immersion. The chief desire of men is to live long and live well, and they will not take a life-giver in a manner that defeats its purpose. A. M. HOCART.

Origin of Tri-clan and Marriage-classes in Assam.

110 SIR,—The importance of marriage-classes in the study of the social organization of the primitive peoples was first emphasized by Bernard Deacon in his classic paper, 'The Regulation of Marriage in 'Ambrym' (*J.R.A.I.*, vol. LVII, pp. 325-342). But any systematic investigation along this line has not been made so far in Assam. It is, therefore, proposed in this letter to offer explanations for its wide prevalence in this area.

In the opinion of Hutton "... three group systems " may have sometimes been produced by the fusion of " conquering and conquered dualities, in which the " superior conquered class have been identified and " fused with the inferior of two classes of conquerors " (Hutton, J. H., *Races of Further Asia*, *Man in India*, XII, 1, 1932.) There are some truth in this statement

but there are other important reasons for it. From the results of our investigations we found that formerly Assam was inhabited by a matrilineal people and afterwards waves of patrilineal immigrants of superior culture came and settled there side by side with the aboriginal people. These immigrants with their improved methods of production attracted the attention of their neighbours and intercourse between them became regular. After some time when the immigrants found that they had some control over the aboriginal population, they tried to assert their patrilineal ideas upon the people and the eagerness of the aboriginal people to mix with them make the task more simple. Though in this way patrilineal dominance became complete in most of the tribes yet the earlier matrilineal instincts are not totally lost and traits of that culture are still preserved in the dominantly patrilineal groups. In the case of marriage a man only avoids the father's group as a patrilineal people and is allowed to marry in the mother's group; but in the case of a girl she has not only to avoid the father's group, but also that of the mother (this is probably due to the influence of women among whom matrilineal traditions are still preserved and who do not like the union of the daughter in her group), and so she has to marry in a different group from that of her parents. The men do not object to it as it does not affect their conventions in any way. In this way a system developed in which two types of descent could work together, one dominant and the other submerged, and the result was that marriage-classes evolved with three clans; while later more clans were added to it with the same principle. The association of marriage with the daughter of the mother's brother with the tri-clan system is also important and a fuller explanation of it has already been given by Mr. Chattopadhyaya (Chattopadhyaya, K. P., *Contact of Peoples Affecting Marriage Rules*, Pres. Address, Anth. Sect., Indian Science Congress, 1931). Thus tri-clan system and marriage-classes of Assam are the result of the intermixture of peoples with two types of descent. J. K. BOSE.

Department of Anthropology, Calcutta University.

Friendship in North America. (Cf. MAN, 1936, 271-2.)

111 SIR,—To the references given by Dr. Mandelbaum in his 'Friendship in North America' (MAN, 1936, 271-2) and Jones's *Fox Texts* (Paes. I), pp. 216-7. See also Père Lecombe's *Dict. de la Langue des Cris*, s.v. 'Compagnon.' From my own unpublished field-notes I may add that among the Southern Cheyenne even at the present time nothing is commoner than for a man to invite his chum to have carnal intercourse with his sweetheart before he himself has done so.

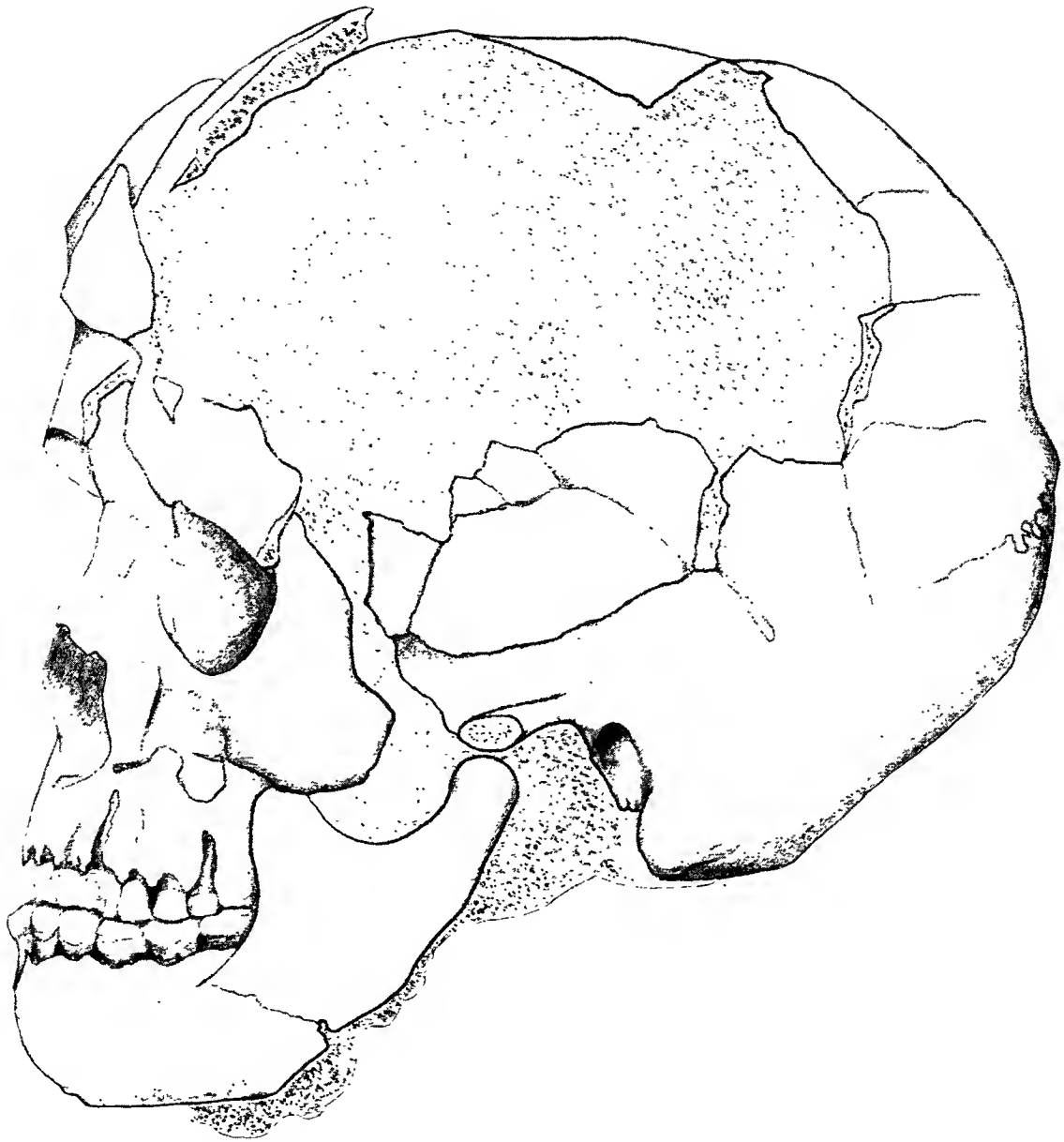
TRUMAN MICHELSON.
Bureau of American Ethnology.

Myth and Saga. (Cf. MAN, 1936, 290; 1937, 50.)

112 SIR,—I can see no analogy between the story of the Burghers of Calais and that of Diomedes' fight with the gods. It appears that the former story was composed by Froissart when he was secretary to Queen Philippa, and that it was intended to flatter her and her favourite Sir Walter Manny. The whole point of it was that it was a plausible story told of living people. The story of Diomedes, on the other hand, considered historically, is a quite incredible one told of a man who had long been dead.

Professor Rose thinks that Hesiod believed in the historicity of the Tale of Troy, but it is at least doubtful whether the conception of historicity, which sat so lightly upon Froissart, existed in Hesiod's Greece.

RAGLAN.



AN ANCIENT HUMAN SKULL FROM SIAM.

From a drawing made at the Royal College of Surgeons.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 113-131

JUNE, 1937

ORIGINAL ARTICLES.

Physical Anthropology.

With Plate F.

Quaritch Wales.

SOME ANCIENT HUMAN SKELETONS EXCAVATED IN SIAM. By H. G. Quaritch Wales, M.A.,
Ph.D., Field Director of the Greater-Indian Research Committee.

113 Under the title *Further Excavations at P'ong Tük (Siam)* I have described in *Indian Art and Letters*, Vol. X, No. 1, June, 1936, some excavations which I carried out last winter under the auspices of the Greater-Indian Research Committee. These were primarily concerned with the investigation of the early Buddhist culture of the Dvāravātī kingdom which flourished in Central Siam about the sixth century A.D., the small village of P'ong Tük, situated on the Meklong River near the north-western corner of the Gulf of Siam, being the site of a settlement of that period. In the course of these investigations an unexpected discovery was made which, though not without interest to students of Indian culture, is perhaps primarily of importance to anthropologists, and it is with this aspect of the matter that I propose to deal shortly here.

We had been excavating a small *stupa* of the sixth century A.D., the base of which was 3' 2" below ground level, and on continuing our excavations we found, at about 4' 8" below ground level, no less than ten human skeletons all lying at full length and with their heads roughly pointing to the west (Plates I and II). While excavating a *vihāra* of the same period some seventy yards away, we found another skeleton in a similar position and lying at the same level as the others. On one of the skulls was found a small oxidized copper earring (*l.c.* Plate III, 9), and in conjunction with several of the skeletons were found corroded iron weapons (*l.c.* Plate III, 1-4), which should be of interest for comparison with the iron weapons that have been found in various parts of the Malay Peninsula.

I concluded that we had brought to light an ancient battlefield, but no potsherds or other objects which might have enabled us to date them were found at this level, a fact which is hardly surprising since the warriors probably died fighting at some distance from their village. Nevertheless I have established in this neighbourhood occupation levels of the sixth and of the eleventh century A.D. which show that since the sixth century A.D. this part of the Meklong valley has been silting up at the rate of about 1 foot in 450 years. If deposition had proceeded at the same rate prior to the sixth century A.D. we can deduce that these warriors lived at about the first century B.C., provided that they had not received artificial burial. In any case they cannot date from later than the sixth century A.D. owing to their relative position to the buildings of that period.

Three of the skulls were brought to England for further examination since it was thought that they might throw new light on the little understood ethnic structure of this part of Siam about the time of its first contact with Indian culture. Dr. Cave, of the Royal College of Surgeons, has kindly carried out this examination and reports as follows: The skulls are certainly not Indian and they appear to be those of Thai people since they exactly resemble the Siamese skulls in the museum of the R.C.S., and show the same filing of the teeth. The latter are not definitely betel stained, but any such stains, if they ever existed, would probably have worn off in the course of the ages. Unfortunately the Môn-Khmer material in the museum is limited to one Talaing

skull, but Dr. Cave states that the skulls we excavated differ widely from this Talaing skull, which is narrower and more prognathous.

It is to be hoped that more Môn-Khmer material may become available for comparison, for until that is the case no definite deductions may be made. All we can say is that, so far as the present evidence goes, it appears to point to the conclusion that Thai colonies were already established in the Meklong valley (and presumably the Menam valley also) in the early centuries of the Christian era; and thus it may be that existing theories on Thai immigration into Siam will have to be revised. It had been thought previously that at that period the inhabitants of Central Siam were Môn-Khmer, because the Môn

language is used in the sixth century inscriptions of the Dvāravatī kingdom. But this may indicate either the existence of a Môn ruling caste, or merely that Môn was then the fashionable literary language of the day.

Plate F is a drawing made at the Royal College of Surgeons of one of the skulls which, though somewhat crushed and damaged by soil pressure, is in a better state of preservation than the others, which, though not complete, are in process of being restored as far as that is possible. The skulls will be stored permanently in the R.C.S. museum, and for further details of the archaeological evidence the reader is referred to the article above mentioned.

THE NATIVES OF MOUNT HAGEN, PAPUA: FURTHER NOTES. *By F. E. Williams, Government Anthropologist, Territory of Papua. Illustrated.*

114 IN MAN, 1934, 140, some notes on the natives of Mt. Hagen were published by E. W. P. Chinnery. Early in 1936 it was my good fortune to be one of a party making an aerial reconnaissance of part of north-west Papua, and as the base of operations was at Mt. Hagen, it was possible during three otherwise unoccupied afternoons and evenings to see something of the natives of the district. I venture, therefore, to add these few notes to Mr. Chinnery's, since the recently-discovered people of the centre of New Guinea have been the object of so much interest.

It was mainly owing to the kindness of Fr. Ross, of the Mission of the Society of the Divine Word, that we were able to visit the natives and learn something of them, and anything beyond the bare description of externals which these notes may contain is due to him. He has spent two years in the Mt. Hagen district and is on excellent terms with its inhabitants, though his former companion, Br. Eugene, was killed sixteen months ago. Now with Fr. Meiser, his present companion, he leads a remote but highly energetic, interesting and useful existence among what may be called a 'new' people.

There may be, according to Fr. Ross' rough estimate, 25,000 natives speaking various dialects of the Mt. Hagen language. They are divided into some 20 tribes, Mogeï, Kobei, Jika, Yauka etc.; and these again into much more numerous local groups. One of the most remarkable features of the newly-discovered peoples of the

central valleys, not only on the Mandated Territory side of the border but also on the Papuan (recently patrolled by Hides and O'Malley) is that they have no villages but live in scattered homesteads. It is to be noted, however, that these homesteads, each house having as a rule its fenced garden and grove of banana trees, are to some extent grouped together in settlements. Instead of villages one finds something like primitive garden cities. And these little garden cities belong to the aforementioned local groups. Fr. Ross informs me that descent is patrilineal and marriage patrilocal. Girls marry young and there is a ceremonial payment. Many households are polygamous.

The Mt. Hagen natives are of strong build and well-fleshed. They have somewhat heavy decided features and a darkish skin. The men mostly wear fine black beards, and the women roll their eyes. Altogether they are a good looking people of a caste which is unmistakably Papuan rather than Melanesian.

I gather that the people in the general vicinity of the mission station have been friendly from the beginning. They have seen few Europeans as yet and the arrival of a plane carrying four strangers as well as the pilot and Mr. J. L. Taylor the Asst. District Officer was a highly impressive occasion. Whatever may be the attitude towards the aeroplane of natives in other countries, I have never observed indifference or boredom among Papuans. At any rate the people of Mt. Hagen reveal no trace of it. When

the aeroplane is about to take off, the crowds of burly natives who throng the drome scatter before the charge of Fr. Ross, a man of short stature with a flowing beard, and blown like chaff before the wind draw up finally along the edge of the drome to turn and gaze upon the great mechanical bird. As they told Fr. Ross, the first plane was thought to be a mighty pigeon which alighted and opened its belly, when out stepped a number of men. This explanation has no doubt been revised, but aeroplanes have not lost their interest.

It is not necessary to tell how these people greet the European except to say that they have not seen so much of him as to have lost their interest in his hairiness, or to have desisted entirely from the habit of plucking tufts from his forearms, or, if he is wearing shorts, from the back of his thighs. They have, however, a distinctive gesture and expression which is worth describing. Looking the white man up and down they flick the hand loosely from the wrist, in a way which seems somehow familiar to the European as if to say 'Well I'm hanged!', and at the same time ejaculate or mutter the word *Wing*. The gesture and word, both of which were constantly in use together, plainly express astonishment and admiration. Fr. Ross suggests that *wing* means literally 'two men', thus going a percentage further than our own 'a man and a half'.

For the main item of dress men wear an apron of fine netting, black, greasy and soft, suspended from the belt and reaching below the knees. They cover their posteriors with numerous twigs of dracana tucked into the belt and hanging downwards. Many of the permanent hedgerows which are so distinctive a feature of the district consist of this plant, so that a man is never at a loss for a new rear garment. The belt itself is of stiff bark, up to 8 inches and more in width usually plain but in some cases decorated with incised geometrical patterns in the style of those illustrated by Chinnery from the Wahgi Landing Ground. In many cases thongs of split cane are neatly bound round the belt near the upper and lower margins. It is not unlikely that these belts, which resemble those of the Papuan Gulf and Delta, served to some extent the function of armour.

The hair is worn short by boys and youths, but nearly all adults seem to have cultivated

a fairly long growth of greasy tags which are sometimes worn free but are in most cases tightly enclosed in bark-cloth bound round forehead and occiput with a band of the same material. The effect is that of a well-stuffed



FIG. 1. PERSONAL ORNAMENTS OF A MOUNT HAGEN NATIVE

globular cushion on top of the head, which besides enhancing a man's stature and appearance, no doubt provides his skull with a very good protection. Over the bark-cloth may be stretched a knitted covering of sometimes very fine workmanship, finer than any similar work I have

seen on the Papuan side of the border. And the broad band which covers the forehead is in some cases effectively decorated. A few individuals wore a frontlet of ornamental leaves over this band, skilfully pinned together and artistically arranged: others a broad strip of cuscus fur: and others again a great number of small white cowrie shells sewn in series on to bark-cloth so as to constitute a very imposing ornament indeed (fig. 1). Above this might be worn a thick fringe of cassowary plumes, and in not a few cases the whole head-dress was surmounted by a bunch of feathers.

The septum of the nose is pierced and the favourite nose ornament is a disk of shell, presumably the ground-down base of the conus. In some noses, at any rate, the alæ are also pierced, and this provides for the wearing of a highly ingenious face ornament. It consists of a string of small white cowries stretching from ear to ear and supported in the middle by the nose (fig. 1). To keep it in place it is fastened by means of two tiny pins, much smaller than matches, which fit into sockets worn in the holes of the nasal alæ. These sockets are provided by the proximal ends of bird quills.

Proceeding downwards, it may be noted that some of the older men wore small ornaments, teeth or suchlike, attached to the tags of their beards, a custom which I have recorded in the Purari Delta.

Of neck ornaments I made note only of the remarkable chains, with round links of, say, $\frac{1}{2}$ in. diameter. They would seem to be made of twisted cane or bamboo, but were so much begrimed with dirt and pig-grease that it was impossible to see the join. The links were stiff and hard, and the chain capable of resisting a strong tug.

On the chest a number of individuals wore the broad furry tail of a marsupial, suspended from the neck and reaching to the waist. But more striking were the huge white *mulo* shells which quite a number affected. The ornament which is apparently prized more than any other, however, is the gold-lip pearl shell. This, it would seem, is not worn on ordinary occasions but displayed at certain feasts and ceremonies. We saw one of them in a men's house at one of the dancing grounds. The shell was not cut into a crescent as commonly in Papua.¹ The

whole circle was set in a heavy frame, consisting perhaps of clay and gum, which was painted with brick-red ochre. Two broad bands of plaited fabric, painted the same colour, were attached, as if to suspend it from the neck. The shell was set with the convex surface outwards and with its pearly-golden colour against the red background looked sufficiently striking, though not, perhaps, very pretty. It would appear that these gold-lips (*ken* or *kin*) are the supreme objects of personal wealth at Mt. Hagen. And a man may wear a visible record of the number in his possession. This, called *omak*, or *goa* (?), is what Chinnery has described as "a row of short parallel bamboo sticks about 4 ins. long, and a quarter of an inch in diameter, fastened together horizontally like a miniature blind." It is worn on the breast (fig. 1). Fr. Ross tells me that, as far as he can ascertain at present, the little bamboos provide a record of full-sized gold-lips in the wearer's possession, and that each rod stands not for one, but for a number, 8 to 10, of these most valuable shells. (This may seem almost incredible and should, as Fr. Ross himself observes, be taken with reserve.) On one visitor at the came I saw an *omak* with 32 rods. Four of them were newer and lighter in colour than the others: they indicated gold-lip which he had acquired recently in trade with the mission or Messrs. Leahy who had been mining in the district. The remaining 28 stood for shells which had come in pre-European times from purely native sources.

It is something of a mystery that so many full-sized gold-lip shells should be found in the remote interior of New Guinea. With one consent the natives of Mt. Hagen point to the south-west as the provenance of these shells, i.e., in the direction of the thickly populated valleys recently patrolled by Messrs. Hides and O'Malley, of the Papuan service. This is only to transfer the problem to another place, for those villages are far removed from the coast and cut off from the lowlands by a most formidable barrier of uninhabited limestone country. And if the gold-lip have been obtained by trade from the Papuan coast it is difficult to explain why they are seen at Mt. Hagen in the full-round, whereas in western Papua, as far as I know, they always appear in the form of a crescent or half-moon. Nor is there any record of a trade up the rivers of full-sized pearl shells from Torres

¹ I saw a woman wearing a crescent and perhaps they are more common than it seemed.

Straits. In connection with this point one is reminded of the observation of Leo Austen, who studied the natives of the Turama River.² They insist in declaring that pearl shells are obtained from the upper reaches of that river, which flows down from the limestone mountains. They profess to be able to distinguish these bush pearl shells from those obtained on the coast, and attach a far greater value to them. I have no idea what may be the geological possibilities of the case: but it is as if there might be an ancient reservoir of pearl shells somewhere in the north-west of the Papuan Delta Division, whether natural or accumulated from other sources by human means, and that specimens not only cross the boundary into the Mandated Territory but have come down as far as the coast of the Papuan Gulf.

To return from this digression to the description of personal appearance, the Hagen woman wears a string belt from which are suspended an apron and tail-piece of the same material, a great number of strands hanging loose. When they dance in the open—and they performed a sort of ring-a-rosy for us with great vim and enjoyment—they knot apron and tail together behind them to prevent undue flapping. They habitually wear a string bag, full or empty, suspended from the crown of the head. Many have armlets of cane or of a black fibre, and on a few of these latter I saw

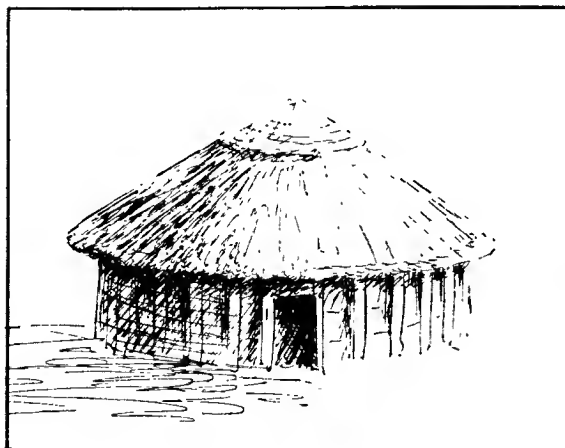


FIG. 2. MOUNT HAGEN MEN'S HOUSE.

patterns woven with yellow dendrobium skin. I noted also a number of tiny gourds worn as pendants and decorated with poker work.

² *The Australian Geographer*, XI, 4, p. 22.

Fragments of larger shell are attached as pendants to their cowrie necklaces. The whole district, male and female, is crazy about shell. Apart from the large gold-lip, or *nolo*, missionary and

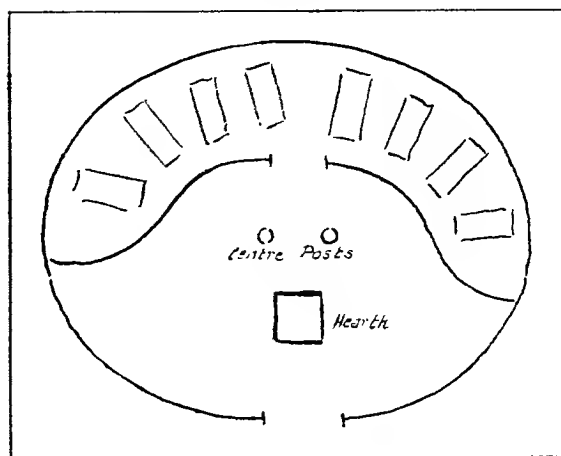


FIG. 3. MEN'S HOUSE, GROUND PLAN.

miner use white or near-white cowries almost exclusively as a means of purchase.

Except for stone axes we saw few weapons. Some men carried a light hardwood spear about the camp, a combined weapon and staff: but the real spears were left at home. I saw two of the great barbed "pikes" with ornamental prongs about one-third of the way from the point, but these, I understand, belong properly to people further to the east. The solitary bow which I saw was smallish and made of bamboo: the arrows light and pointed with hardwood. The beautiful axes which Chinnery has described and illustrated were very numerous. Their fine workmanship and the extreme brittleness of the stone together make it likely that they are used as little as possible. Like some of our walking sticks, they appear as dignified ornaments rather than objects of utility. Though since so much care is commonly lavished upon weapons which are doomed to destruction in the act of killing, I dare say that the Mt. Hagen native would not hesitate about chipping the edge of his beautiful axe on a suitable cranium.

There is no doubt that the Mt. Hagen natives are well endowed with the æsthetic sense, and it finds further expression in their building. I have not seen anything in Papua more workmanlike than their houses, some oblong with rounded edges and others circular. We examined

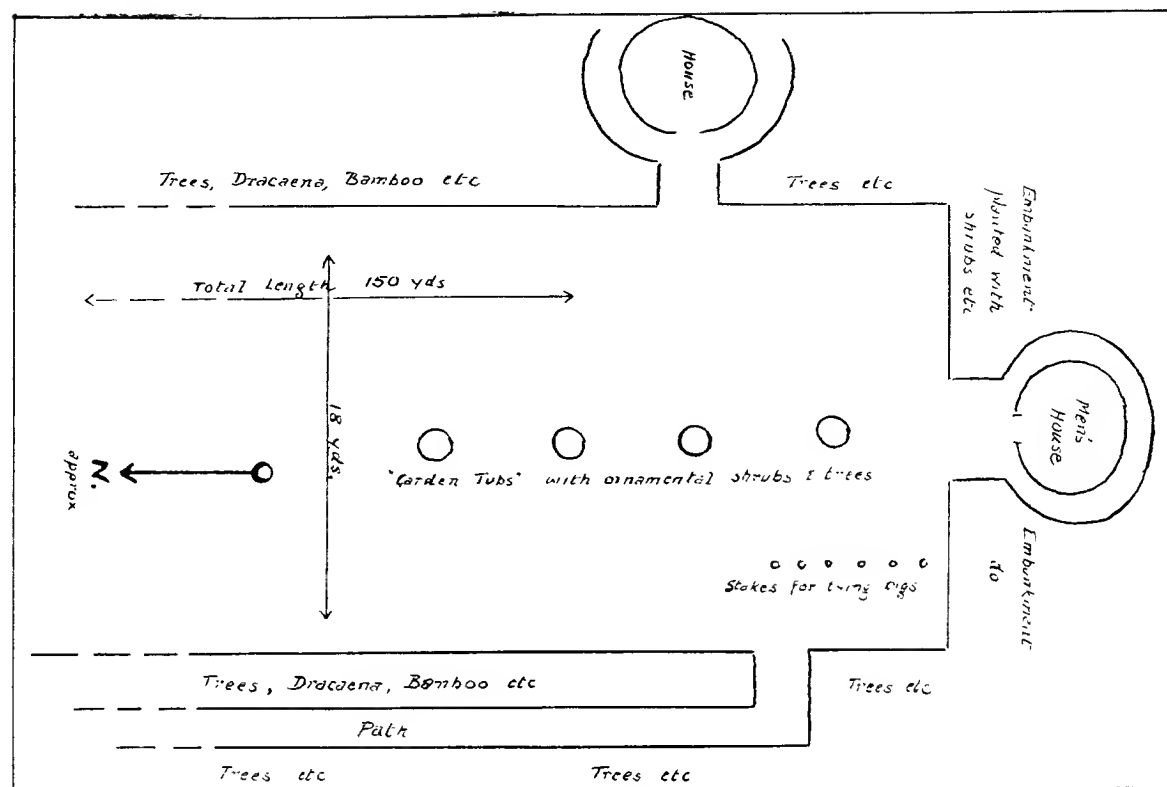


FIG. 4. PLAN OF MOUNT HAGEN DANCING GROUND.

a men's house (figs. 2-3). of the latter type, at the end of one of the dancing grounds. It had an inside diameter of about 16 ft. The conical roof was hardly more than 8 ft. high in the centre, and extended in fairly substantial eaves over the 3 ft. 6 ins. walls. An unusual feature of this particular house was the pile of red earth on its summit. Fr. Ross tells me that it had caught fire at this point and that in repairing it the men had piled on the earth, perhaps as a precaution against another conflagration. The roof was heavily thatched with grass and the edge neatly trimmed. The wall was made of bark sheets supported inside and out by spaced uprights of adzed timber. Along the upper edge on the inner side was a rude decorative fringe about 10 ins. in width with a series of small slats running obliquely. Around the centre pole there were three large bundles of dried leaves one about the other, each about 3 ft. in diameter, and very neatly contrived. One was of bracken and the others, which I could not identify, were equally ornamental. I have no idea what purpose they served, but they were certainly

decorative in effect. There was one narrow door, 3 ft. by 2 ft. above which were tied a number of pig jaws. Between this door and the centre pole lay the hearth; and a remarkable feature of this and other houses was a sort of ladder of short close-set rungs extending from above the door to the peak of the house. This, being directly over the hearth was said to have something to do with the get away of the smoke, though I thought it might be a means of drying firewood. A number of mats were ranged concentrically about the hut, and the interior was warm and unbearably smoky. The best way to breathe was to squat as close as possible to the ground.

The above-described was a men's house into which it is said the women do not enter, though while we examined it one of them sat in the doorway and followed our every movement with her eyes. (Incidentally the Hagen natives, according to Fr. Ross, have no bull-roarers or other mysteries.) Another house of the round type, this time a family dwelling, was divided into two compartments in a most ingenious and symmetrical manner, which will be best under-

stood from the plan (fig. 3). There happened to be two central posts and behind them was a doorway leading into an interior compartment, presumably belonging to the women, in which a number of mats were neatly arranged. The curving walls of this compartment reached from the floor to the roof. We visited this house in the evening, when the outer room was lined with men and women singing and watching a performance of the peculiar nose- or forehead-rubbing ceremony described in Chinnery's article.

The common type of house—oblong, with rounded ends—is again divided into a general room and an interior compartment for women. There are also little alcoves provided for the pigs, which live by night under the family roof. Some of them are tethered by the leg; others are free, but as comfortable and well-behaved as a dog in a kennel.

One of the most remarkable features of the district is the dancing ground. There are many of these, and from the air it may be seen that they all roughly conform to the same pattern, viz., that of an oblong enclosure lined with ornamental trees and shrubs and with a round house built in a sort of recess at the end. The two which we actually visited both possessed the alley along the side with a small entrance near the right shoulder of the enclosure, though I cannot say whether this is a regular feature. The rough plan (fig. 4) is of a dancing ground quite close to the Hagen drome. (The other did not have the extra house on the left.) It was in good order and pleasantly turfed. Down the centre, at the upper end, were set four permanent structures of bark and timber resembling garden tubs, about 4 ft. high, which contained casuarinas or ornamental plants; and the whole enclosure was walled by a dense hedge of trees, bamboos and dracæna. The recess in which stood the round men's house at the end had been excavated to the level of the dancing ground, or else the earth at either side had been banked up around it. These embankments were thickly planted with various bushes. The far end of the enclosure, which reached a length of 150 yards, was open. The whole dancing ground was an astonishing example of good construction and good gardening.

The utility gardens seem to show the same attention to tidiness and finish, and it is beyond doubt that these people take an artistic interest in their horticulture. This is manifested in the

neat fences (for which cane, cut in short lengths and set upright, provides the material), the paths (sometimes fenced on either side), the dracæna hedges, and the ornamental shrubs and flowers.

The habit of dividing the gardens into small square plots adds to this general appearance of tidiness, though it presumably rests on some other motive. The fenced enclosures are subdivided into squares, about 9 ft. by 9 ft., by means of shallow drains. These are about 10 ins. deep and 10 ins. wide. The gardeners use a liana and pegs for measuring and manage to achieve a good deal of accuracy. Having laid down the line they clup along either side of it with a rough trenching tool, a stick about 6 ft. long with a spatulate end; then they remove the line and dig out the earth, throwing it on either side onto the plots where the sweet potatoes are to be planted. The plots themselves are not actually tilled.

The natives, according to Fr. Ross, are unable to give a satisfactory reason for this practice of trenching. They merely declare that they are following the usage of their ancestors, though some men, pressed for an explanation, suggested

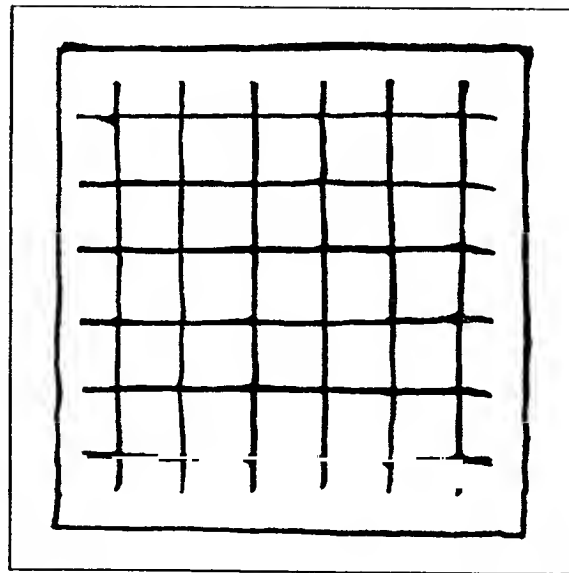


FIG. 5 MOUNT HAGEN: PLAN OF DRAINED GARDEN BEDS.

in our presence that it might be to avoid damage by the floods. This may, indeed, have been the long-ago reason, but the practice is nowadays continued on the higher parts of undulating

ground, where the floods could do no actual damage. I noted also that, whereas the whole garden is usually surrounded by a larger drain, the small 10 in-drains, which separate the minor plots very commonly (though by no means always) stop short of it, in the manner shown by fig. 5. The soil, incidentally, is for the most part not soggy, but light and friable.

The staple diet is sweet potato. Bananas are also numerous, and there is regular cultivation of beans which are grown in orderly plots, each plant being furnished with a short slender pole. As Fr. Ross points out, however, the general standard of horticulture is not, after all, so very advanced. The people do not practice any kind of tillage or manuring, and certainly there is no irrigation, and their sweet potatoes are by no means remarkable for size or quality.

Our flights from Mt. Hagen across the border in a westerly and south-westerly direction took

us over the country recently explored by Hides and O'Malley. The great inland valleys on the Papuan side are in many respects similar to those east of Mt. Hagen. They carry a population which is, perhaps, equally heavy, and it is once more disposed on the homestead plan rather than in villages. One curiously striking difference to be observed from the air is that on the south side of the border the square plots of the checker-board gardens give place to round plots, which reminded me of nothing so much as rivets in a steel girder. Mr. Hides' graphic descriptions of this region have already appeared in the Press, and another expedition, led by Mr. Ivan Champion, is now on its way into the same country, approaching it this time from the south. The upland valleys on either side of the Papua-New Guinea border hold a great reservoir of comparatively unknown peoples who are bound to provide much interesting material for study.

A METHOD OF BEAD-MAKING PRACTISED IN THE GOLD COAST. *By R. P. Wild, Inspector of Mines, Gold Coast. Illustrated.*

115 The following account of a method of making glass beads, which hitherto appears to be unknown to authorities on beads in this country, was brought to the notice of the writer at Dunkwa on the Offin River, Gold Coast, in April, 1934.

The process consists essentially of filling holes in clay moulds with powdered glass of different colours, followed by firing and grinding.

From inquiries made it was gathered that the manufacturers of these beads were people from Apollonia, the district which borders the sea in the west of the Gold Coast, and who had come inland in order to make and trade these beads at Dunkwa in the Denkira country. No amount of questioning would induce these Apollonians to disclose the source of their technique: their replies being evasive as is usual with natives, especially in this case, where they appeared apprehensive that their 'patent' might be infringed and a 'rival firm' set up.

However, it may be that they were the originators of this method, as numerous inquiries either in the Gold Coast, Ashanti or England have so far failed to trace the origin any further back. On the other hand, there is a possibility that the process was introduced from the neighbouring Ivory Coast, as the western boundary of Apollonia forms the frontier line between the Gold Coast and the Ivory Coast.

The moulds (fig. 1) are made from a good local clay, which possibly contains a high percentage of kaolin. They have no definite shape, but are made roughly by hand into flat slabs from 1 inch to 1½ inches in thickness.

Holes, more or less circular, at irregular intervals, are formed in the clay: the diameters and depths are varied as required to suit different sized beads. In the centre of each hole is a much smaller hole going right down through the mould to its other side, and into these smaller holes the midribs or leaf-stalks of cassava (*Manihot* spp.), about the length of a safety-match, are inserted. The cassava is first made wet and smeared with clay, the effect of which is to cause the cassava to carbonise and not burn away when firing takes place. In the illustration the moulds, circular holes, and the charred cassava stick can easily be seen.

The next part of the process consists of powdering various coloured glasses, which is accomplished by grinding on the common stone slab used for grinding corn. Different coloured bottles and European glass beads are obtained and ground down fairly finely to about a 60 mesh.

The powdered glass is then poured into the holes around the cassava sticks in layers, which are arranged according to the colour and thickness desired. The moulds which the writer procured



FIG. 1. CLAY MOULDS FOR BEAD-MAKING, FROM THE GOLD COAST.

would permit of beads from half an inch to one inch in length being produced.

When the filling of the holes with powdered glass is completed, the moulds are put on a charcoal fire and covered all round with charcoal and the whole is then banked up with firewood. The writer, when visiting the factory, formed the opinion that the process of firing was also conducted in one of the beehive ovens used for bread-making.

The cassava sticks carbonise when the firing takes place, thus leaving a small tubular hole in the centre of the bead. From the nature of the operation and from the known qualities of glass when subjected to heat the writer concludes that there was no complete fusion of the glass, but the heat was sufficient to produce a 'fritting' or to reduce the glass to a state of being pasty on the edges of the particles: thus causing the grains to adhere. This opinion is borne out by the fact that the fired bead has a granular appearance. The crude beads have then to be polished and

for this purpose they are rubbed on a flat stone for a long time, both the barrel and the ends undergoing treatment.

The resultant bead has a streaky appearance which simulates the highly prized 'Aggrey' beads of the Gold Coast, and therefore a keen demand soon resulted.

The manufacturers did not employ either borax or salt, nor were any chemicals used in order to obtain effects: they depended entirely on coloured glass. Needless to say, coloured bottles, for the time being, were in great demand in the neighbourhood, green, yellow and brown being the colours usually preferred. Specimens of the moulds and the beads have been deposited at the British Museum, the Pitt-Rivers Museum, Oxford, and the University Museum of Archaeology and Ethnography, Cambridge.

The writer is indebted to Mr. H. J. Braunholtz, of the Department of Ethnography of the British Museum, for the photograph from which the illustration has been reproduced.

BRITISH AND SAXON FUSION. *By Sir Flinders Petrie, D.C.L., F.R.S.*

116 The extent of the fusion of British and Saxon has been much debated, but mostly by townsmen rather than by countrymen in touch

with living conditions. The first need is to see clearly the difference in outlook between nomads, woodlanders, farmers, villagers, and townsmen

First, look at what yet remains of woodland life. Sixty years ago (and in some places yet), in the spring, caravan carts usually go round with brushes, brooms, and handy ware to sell in the towns. These are the last survivals of the man who brought the product of woodland crafts, which had been made in the winter, down to the villagers and townsmen, so soon as there was a supply of farming products to be had in exchange. The spring festival—celebrated at Easter like the Passover—with its feast of milk and meat, drew down the woodlanders to sell their products. The difference between seller and buyer, in work and outlook, is evident.

Then, further, there is a mass of handicraft of the woodland, in the furniture making, as it continues still on the Chilterns and other woodlands. The outfit seems absurdly simple to a factory man. The lathe for chair legs is merely any springy bough and a piece of cord. It can be set up anywhere, and abandoned at the end of the season. The tools are very simple, and there is nothing that dates it within the last three thousand years: it is clearly a primitive woodland industry, and turned wood is found in British lake dwellings even before square rooms were adopted.

All this life reacts upon the standards and habits of the people. Dwellings are scarcely fixed, work goes on anywhere in the woodland: the sweet shelter of trees, which shade and keep warm the ground below, only gave place, for the winter frosts, to underground burrows, where the Britons used to store their grain. Their fortresses were stockades in the woods. But, as with nomads, there is no need of the tidiness and cleanliness of a fixed dwelling, and to this day the descendants of the British have different standards to those of the fixed Saxon. The British were essentially an upland folk, cultivating the terraced downs capped by woodland. They neglected the marshy valleys which enticed the Saxon cultivator.

The picture of invasions, which the British records have left us, is that of co-operation rather than the spectacular destruction occasion-

ally marked in the Saxon traditions. In most cases the invaders took over the control from the ruling class, as later the Norman took it over from the Saxon. Here the separate interests of the woodland life and the valley farmer would leave a wide ground for toleration. When the woodland Briton came to barter with the farmer, his children would naturally come with him to care for the trading stock. The boys might find room as cowboys, the girls were a regular unit of value in wergeld, along with cows. It is on record (Jocelyn) that an Irishman thought it no shame to sell his daughter into a more civilized and settled society. The easy way in which wives of Hebrew nomad patriarchs slipped into civilized Egyptian society is a parallel case.

Thus we can see how naturally the Briton and Saxon would fuse together, while each living in the way to which they were best fitted. The purest Saxon is in regions such as Andredswold, the weald of Sussex, which were scarcely occupied by the British.

The question of colour in the present day must not be pressed too far. The British were mostly fair like the Saxon, and it has been pointed out that races tend to darken, in the average, and youthful tuberculosis is worst in the fair types and so reduces their progeny more than that of the dark races whose diseases are more of mature age, after the family is grown.

We need now to record all the life and the local words used among the present woodland dwellers. The Celtic *bascanula*, as origin of 'basket,' is already familiar, and all other words not distinctly Saxon should be collected. Then it will be a question of the origin of such words in Continental peoples, Frisian, Rhineland, Celtic, Danish, or Norse, and hence the allocation of them to the Belgic and other immigrants.

That a large amount of Bronze Age culture survived in special centres is seen in the spiral designs of the hanging bowls, personal ornaments, and engraved stones of Scotland, such patterns being found as far east as Ely. Both marshland and upland serve as refuges from the pressure of immigration.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

**A Comparison of Three Systems of Primitive
117 Economic Organization.** *Summary of a
Communication by Dr. Kalerco Oberg.*
25 May, 1937.

The aim of this paper is to analyze and compare

three systems of primitive economic organization in terms of a number of economic concepts, such as co-operation, risk and insurance, capital, leadership, property and specialization. The three peoples selected for this study are the Tlingit Indians of

Alaska, the agricultural Bantu and the pastoral Bahima of Uganda. The material on which this study is based was gathered by the writer of the paper in the field.

The paper hazards an answer to the question, whether differences in systems of economic co-operation are merely chance variations, or, whether they are the product of varying methods of adjustments to particular environmental conditions. For this purpose economic organization is viewed: (1) as a special configuration of relationships between men, (2) as a relationship between men and particular physical conditions as they are made effective through technical invention, (3) as a body of integrative mechanisms operating to maintain co-operative relationships.

Special stress will be laid upon the comparison of differences in degree and in kind. What, for instance, is the relative extent of collective and exchange activities in acquisition and what effect have these activities on the relative range and solidarity of relationship patterns? How are economic risks met in each system? What is the relative amount of capital in each system and how does capital effect relationships? Finally, an effort will be made to show the relationship between capital, specialization and population density and the tool system, and the specific environment in which the economic systems operate.

Human and Other Remains in the 100-ft. Terrace at Swanscombe.

118 In June, 1935, Mr. A. T. Marston was responsible for the discovery of a human occipital bone at a depth of 24 feet (7.3 metres) from the surface in the stratified Middle Gravels of the

100-ft. terrace of the Thames at Swanscombe, Kent. The following March he discovered a left parietal bone which articulated perfectly with the occipital. Both bones lay in the same seam of gravel, though at a distance of 8 yards (7 metres) from one another. Associated animal bones (*Elephas antiquus*, etc.) indicate interglacial conditions, and Middle Acheulean implements, in an unabraded condition, occurred at the same horizon.

Preliminary accounts of the discovery appeared in *Nature* (19th October, 1935, and 1st August, 1936), and on 12th January, 1937, Mr. Marston delivered a lecture on his excavations at the Royal Anthropological Institute (MAX, 1937, 35). His full report will be published in the *Journal* of the Institute.

Under the aegis of the Institute a Committee has been formed to investigate the evidence which Mr. Marston has collected, and to co-operate with him in the further exploration of the site. This Committee consists of Mr. M. A. C. Hinton, F.R.S., Keeper of Zoology, British Museum (*Chairman*); Mr. K. P. Oakley, Department of Geology, British Museum (*Secretary*); Professor P. G. H. Boswell, F.R.S., Department of Geology, Imperial College of Science, London; Professor W. E. Le Gros Clark, F.R.S., Department of Anatomy, University of Oxford; Mr. H. G. Dues, Geological Survey of Great Britain; Mr. C. F. C. Hawkes, Department of British Antiquities, British Museum; Professor W. B. R. King, Department of Geology, University College, London; Mr. A. T. Marston, L.D.S.; Dr. G. M. Morant, Galton Laboratory, University College, London; and Mr. S. Hazzledine Warren, F.G.S. The Committee will prepare a joint report on its findings, which will be published in due course.

PROCEEDINGS OF OTHER SOCIETIES.

International Congress of Anthropological and Ethnological Sciences. Meeting of the Permanent Council: Paris, 8 May, 1937.

119 In preparation for the Second Session of this Congress which will be held at Copenhagen from August 1 to 6, 1938, the Permanent Council met at Paris on Saturday 8 May, 1937, on the invitation of Professor Paul Rivet, Director of the Trocadéro Museum of Ethnography.

The meeting was held in the stately Board-room of the Compagnie Générale Transatlantique, graciously placed at the disposition of the Congress by the Chairman.

The President of the Congress, Professor Thomas Thomsen (Copenhagen) took the chair, and there were present, in alphabetical order, Messrs. Birket-Smith (Copenhagen), Brauholtz (Great Britain), Brodrick (Great Britain), Delachaux (Switzerland), von Eickstedt (Germany), Frets (Netherlands), Hildén (Finland), de Jonghe (Belgium), Kleiweg de Zwaan (Netherlands), Koppers (Austria), Krause (Germany), Lester (France), Mauss (France), Myers (Great Britain), Rivet (France), Rivière (France), Schmidt (Vatican City), Sergi (Italy), Seligman

(Great Britain), Spiser (Switzerland), Stolyhwo, Miss Tildesley (Great Britain), Vallons (France), Utsurikawa (Japan), Valšík (Czechoslovakia).

Among other business, the lists of the *Council of Honour* and *Council Permanent* were revised, the date of the Copenhagen Session (August 1-6, 1938) was approved, and the sectional organization was established, on the same general lines as for the London Session of 1934. Reports were presented on the work of the Committees on Documentation or Anthropological and Ethnological Films, and on the Standardization of Anthropometric Measurements. On the previous evening, the members of the Permanent Council were ceremoniously received and entertained in the Hôtel de Ville, and after the session, at a lunch given by the Municipality of Paris, at which the success of the Copenhagen Congress was eloquently proposed by M. Lévy-Bruhl. In the afternoon a river excursion was provided by the authorities of the International Exhibition, which gave an impressive view of the work in progress; and a memorable day ended with a dinner given by Mr. and Mrs. James Haden Hyde in their beautiful Parisian home. J. L. M.

OBITUARY.

Dewan Bahadur Dr. L. K. Ananthakrishna Iyer, 1861-1937.

120 L. K. Ananthakrishna Iyer was born into an orthodox Brahman family in Palghat in 1861, and was educated at the Government High School and Victoria College in Palghat, and at the Christian College, Madras. Soon after taking his degree in Natural Science at Madras University, he served for some years under the Madras Government, but resigned in 1890 to take a post on the staff of Victoria College. The expansion of the

the University, in which Department he was Reader in Ethnography and Chairman till 1932.

Dr. Iyer's activities while Reader in Anthropology in the University of Calcutta were never confined to one sphere or locality. In 1924, as the Officer in charge of the Mysore Ethnographic Survey, he began regularly to utilize the vacations in touring the villages of Mysore in order to revise and complete the work done by the late H. V. Nanjundayya; he added accounts of over a hundred tribes and castes to the earlier survey. The last of the four volumes of this monumental work was published in 1935.

Dr. Iyer acutely realized that there was yet another important gap in our knowledge of the ethnography of South India, and with Government help he began an ethnographic survey of Coorg in 1934. At the time of his death he was engaged in drafting the report of his investigations, the manuscript of which was almost completed. In January, 1937, he delivered the Presidential Address on the social organization and customs of the Coorgs to the Anthropological Section of the Indian Science Congress held at Secunderabad.

Early in October of last year Dr. Iyer with his wife started on a tour of pilgrimage, and travelled during the succeeding three months over nearly the length and breadth of India. They visited all the important pilgrim centres from Cape Comorin, in the extreme south, to Hardwar at the foot of the Himalayas, eventually they reached Delhi and Calcutta in December. Thence they went to Bombay and then to Secunderabad and returned to Palghat about the middle of January. The long tour must have told on Dr. Iyer's health, but from the date of his return to Palghat he was physically active and performed his daily routine of work as usual, though from the 20th to the 25th of February he suffered from indigestion, but his physician had no reason to suspect anything serious. For about a year previously Dr. Iyer had been worried about the affairs and the reconstruction of an ancient temple at Palghat for which he had been appointed Executive Trustee by the Madras Government. He discussed this work in the evening of the 25th with his fellow trustees till 11 p.m., and retired to bed immediately afterwards. Two hours later, his heart gave way in an utterly unexpected and inexplicable manner, and so passed away in his country home at Lakshminarayanapuram, Palghat, the doyen of Indian anthropologists.

As a Palghat Brahman, Ananthakrishna Iyer was generously endowed with mental ability and a zest for work; to say nothing of the strength of character which the discipline of orthodox Hinduism imparts when rightly directed. He possessed that detachment from local loyalties which is a necessary requisite for impartiality in Indian research, for the Palghat Brahmans are immigrants from the Tamil country. His amazing energy could be thoroughly appreciated only by those who saw him in his chosen field and visited with him a Nambudri



FIG. 1. DEWAN BAHADUR DR. L. K. ANANTHAKRISHNA IYER.

educational activities in the Cochin State, with the promise of better prospects, led him to take service in that State in 1897. His organizing capacities very soon attracted the attention of the Cochin Durbar and his services were utilized to develop a State Museum, Zoological Gardens, and an Industrial Bureau; of which departments he was Superintendent from 1913 to 1920. In 1902 he accepted responsibility for the ethnographic survey of Cochin. On retiring in 1920 from the service of the Cochin State he was invited by Sir Asutosh Mookerjee, Vice-Chancellor of the Calcutta University, to organize a Department of Anthropology in

manor, a Nayar mansion, an Izhuvan congress, a Syrian church; or watched him coaxing a gang of shy Nayādis to come within the 300 feet which custom prescribes as the limit of their approach to a Brahman; or witnessed him courting the confidence of a seminar of Bengali lads. He loved his self-taught job.

Dr. Iyer will be remembered in the future for his field-work in anthropology and ethnology. His investigations into the social organization, manners and customs of the tribes and castes of Cochin State extended over a period of eighteen years, during which he led a busy official life concerned with the duties of several different departments. His learned work on the tribes and castes of Cochin with its wealth of detail, earned for him a well-deserved reputation among British, European, and American ethnologists, which was enhanced on the publication of the equally valuable record of the tribes and castes of Mysore. His book on the Syrian Christians of Malabar is of great interest and broke new ground.

Dr. Iyer wrote a large number of papers on various anthropological subjects in scientific journals, in more or less popular magazines, and in the daily press. From 1914 to 1930 he published two papers annually in the anthropological section of the Indian Science Congress. His lectures on ethnography indicate the scope of his formal instruction.

No account of Dr. Iyer's work would be complete without a reference to his activities as a pioneer in the cause of anthropological teaching and research in India. Apart from his college and university duties, on all appropriate occasions of scientific gatherings, and when visiting the principal colleges of any new place or town he never missed an opportunity to talk on the value of anthropology to those interested in social matters. He was a Foundation Fellow of the Indian Academy of

Sciences, Bangalore, and of the National Institute of Sciences, Calcutta.

In 1934 Dr. Iyer attended the International Congress of Anthropological and Ethnological Sciences in London, of which he was elected a member of the Comité d'Honneur, and was Chairman at one afternoon session. During this journey to Europe he lectured at the University of Oxford, and in Paris, Rome, Florence, Vienna, Berlin, Breslau, Königsberg, Halle, Bonn, and Cologne. He was elected an Officier d'Académie, Paris, and received the Honorary Degree of Doctor of Medicine and Surgery of the University of Breslau. The University of Florence gave him a medal.

In recognition of his services to ethnology, Dr. Iyer was elected a Corresponding Member of anthropological and ethnological societies in Washington, London, Florence, Vienna, and Cologne.

The title of Rao Bahadur was conferred on Dr. Iyer in 1921 and that of Dewan Bahadur in 1935. He was awarded two medals by the last two rulers of the Cochin State for services rendered to the State.

List of books published by L. K. Ananthakrishna Iyer:—

THE COCHIN TRIBES AND CASTES. Vol. I, pp. 1-366, with 44 illustrations, 1908; Vol. II, pp. 1-504, with 81 illustrations, 1912. Cochin Government Press, Ernakulam.

THE MYSORE TRIBES AND CASTES: Vol. I, pp. 1-550, with 60 illustrations, 1935; Vol. II, pp. 1-578, with 78 illustrations, 1928; Vol. III, pp. 1-615, with 75 illustrations, 1930; Vol. IV, pp. 1-550, with 75 illustrations, 1931. Mysore Government Press, Bangalore.

THE ANTHROPOLOGY OF THE SYRIAN CHRISTIANS OF MALABAR, pp. 1-340, with 44 illustrations. Cochin Government Press, Ernakulam, 1925.

LECTURES ON ETHNOGRAPHY, pp. 1-277, with 32 illustrations. Calcutta University Press, 1925.

A. C. HADDON; F. J. RICHARDS

REVIEWS.

AMERICA.

Tribal Distribution in Washington. By Leslie Spier. (*General Series in Anthropology, Number 3.*) *Minaska, Wisconsin*, 1936. 40 pp. + bibliography and map.

121 Dr. Leslie Spier has systematized the information about the historical distribution of Indians in the present State of Washington available from printed sources and from recent fieldwork. This has not been an easy task. 'Tribal' distribution in Washington is an artificial thing. In the western part of the State villages seem to have been politically autonomous while only slightly differentiated in culture, and neither culture-groups nor dialect-groups (the latter recognized by the natives) can be identified with 'tribes.' In eastern Washington there were bands whose winter villages were fixed but whose summer fishing stations were shared with people of different speech and social consciousness. Residence with a particular local group is no guarantee that an individual 'belongs' to that tribal unit. Dialectic and territorial community are clues to the larger groupings; but it is not desirable, says Spier, to assume that dialect and tribal grouping are one and

the same. The construction of a distribution map is even more difficult. While it is usually possible to set down roughly the general locus of a tribe, it is by no means easy to fix the boundaries of its territory. In fact, it is doubtful if a single one of the Washington tribes thought in terms of boundaries. Our information usually includes some statement of their settled sites, to which they returned year after year, and in some instances data on the areas they normally traversed in seasonal wandering. We have two alternatives: to map only the permanent sites, or to assign boundaries. Dr. Spier has adopted the latter alternative, assigning—tentatively, and with a view to further inquiries in the field—location and boundaries as of the early nineteenth century. BARBARA AITKEN.

Mitla, Town of the Souls. By Elsie Clous Parsons. (*Chicago University of Chicago Press*). *England, Cambridge University Press*.

122 Mrs. Parsons in this book has made a valuable study of culture change—a task which she was peculiarly well qualified to undertake from her great knowledge of

the life of the Pueblo Indians, which gave her a special approach to that of the Zapotec, who are the descendants of one of the races of high culture in ancient Mexico.

A full and excellent account is given of the present culture, including the kinship system. It is interesting to know that, though the Zapotec language is still spoken, the Spanish words in it amount to about 25 per cent. This confirms a remark of the present reviewer in reviewing Radin *An Historical Legend of the Zapotecs* (MAN, 123, 1937) and justifies his doubts therein expressed.

The author as usual succeeds in being both accurate and extremely readable. The personal histories and the comments made by the people are a valuable feature of the book and make the present Zapotec a living people for the reader. The influences of both Indian and Spanish civilization, and the tendencies of modern change are discussed with much acuteness. There will be general agreement with most of Mrs. Parsons' conclusions, though perhaps she has not given sufficient weight to the fact that the higher races of Mexico and Central America, such as the Aztec, Zapotec and Maya, were definitely more advanced in civilization than the Pueblo peoples, and that it is therefore unsafe to interpret their religion and government too exclusively in Pueblo terms. It is natural that she should be influenced by her Pueblo experience and it is also not surprising that her references to the old civilizations leave some room for criticism.

She makes frequent references to *The Year Bearers People*, by La Farge and Byers, and it is surprising to find her always referring to the Jacalteca as Quiché, although they are very different in language and otherwise. It is a further complication that she refers to the real Quiché as Quiché also. The illustrations are very good.

RICHARD C. E. LONG.

An Historical Legend of the Zapotecs. By Paul Radin. (*Ibero-Americana* 9; Univ. California Press, Berkeley, Cal.; Cambridge University Press, England.)

123

Dr. Radin gives both the Zapotec text of this legend, obtained by him from a Zapotec and an English translation, and an interesting discussion of the sources of the story, which is a variant of that (already known) of the marriage of the Zapotec king to the daughter of the king of Mexico. The vital question is whether the

legend obtained by Dr. Radin represents a genuine oral tradition or is derived in whole or in part from literary sources. The author, after going into all available evidence, concludes that it does represent oral tradition notwithstanding that incidents of Zapotec history were at one time selected as subjects for essays in the schools of Oaxaca. The reviewer has noticed that the Zapotec text contains a large number of Spanish words—a fact which might tell against the probability of an oral tradition surviving when the Spanish influence is so strong.

In any event Dr. Radin deserves the thanks of all students for bringing this interesting legend to light.

RICHARD C. E. LONG.

Aboriginal Population of Northwestern Mexico.

By Carl Sauer. (*Ibero-Americana* 10; Univ. California Press, Berkeley, Cal.; Cambridge University Press, England.)

124

This paper is described by the author as an attempt by a historical geographer to consider aboriginal density of population for one particular area. The subject is treated very thoroughly and the conclusions reached seem justified and well-balanced. Dr. Sauer has previously done much valuable work on this little-known region, which possesses a very special interest because within it falls the boundary between the high cultures of ancient Mexico and the low cultures to the north; and in this paper he gives much valuable information as to the peoples inhabiting it, the causes of depopulation and the physical nature of the country considered with regard to the possible population it could have supported.

RICHARD C. E. LONG.

Uto-Aztec Languages of Mexico. By A. L. Kroeber. (*Ibero-Americana* 8; Univ. California Press, Berkeley, Cal.; Cambridge University Press, England.)

125

The author deals with the general classification of the Uto-Aztec languages in Mexico with special reference to the work of Dr. Carl Sauer in an earlier paper of this series. The present paper is largely concerned with sound shiftings which are very fully dealt with considering the rather scanty vocabularies at hand. It also gives a brief note on some kinship terms and an excellent map of the linguistic distribution.

RICHARD C. E. LONG.

GENERAL.

The Web of Thought and Action. By H. Levy. (*Library of Science and Culture*, No. 2.) London: Watts & Co., 1934. Pp. = 238 pp. Price 7s. 6d.

126

This book is a series of what appear to have been wireless broadcast talks in which Prof. Levy cross-examines experts in a wide range of subjects about their methods and aims and the relations between their disciplines and others. Particular attention is paid to the bearings of each discipline on social and economic problems. There is much of interest to anthropologists in its pages, especially Mr. C. K. Ogden on "The Magic of Words," Mr. John Pilley on "The Crucible of Society," and Dr. Edward Glover on "The Need for Reality Thinking." E. E. EVANS-PRITCHARD.

Plant and Animal Geography. By Marion I. Newbigin, D.Sc. London, 1936. 298 pp. 39 illustrations. 12s. 6d.

127

This book is of sufficient merit to take its place in the existing and copious field of geographical literature without the names of Newbigin and Fleure, which stand as a hallmark on its cover.

The geographer at first glance may be disappointed to find only more on Flora and Fauna with which he is already wearied, but whereas his weariness has resulted from the perusal of mere lists and summaries of specimens that might be dead or alive, and are more in keeping with the old type of "capes and bays" geography, Dr. Newbigin has in this book dealt with the biological aspect of geography in the vital and modern way and has explicitly laid down the principles underlying the study of ecology.

The anthropologist also may be disappointed to find no chapter on his favourite species, but he will find much interesting reading and a chapter on soils wherein Miss Dunlop has set out with simplicity and lucidity the principles of classification as adopted by the pedologists of to-day. To the field worker this chapter may be of help in the compilation of his notes on agriculture.

The Biologist should have no complaint but will find in this book a useful summary of Botanical and Zoological classification leading to a distribution of species over the earth.

The book is a useful and needed contribution that

should be of value to the advanced student in Geography and Biology, in School, Training College and University alike.

G. P. L. MILES

The Dangers of Being Human. By Edward Glover. London: Allen & Unwin, 1936. Svo. 206 pp. Price 5s. net.

128 Readers of Mr. Glover's *Nar, Sadism, and Pacifism* will know what to expect from this examination of some of the problems of civilization, composed originally for broadcast transmission. His theme is the

relation of psycho-analysis to social problems, and Dr. W. R. Inge commends his method and conclusions in a characteristic introductory note. Main topics are described as 'the cost of becoming civilized,' 'the quest of social sanity,' 'civilization's choice of scapegoats,' 'crime and ill-health,' 'the unconscious causes of war,' and 'education on culture-transmission.' There is much here for anthropologists to consider carefully, whether they are concerned with non-European cultures, or with the survivals of savagery among ourselves, which from a practical, as well as a scientific standpoint, deserve no less attention.

J. L. M.

CORRESPONDENCE.

The Stone Age Cultures of Uganda. (Cf. MAN, 1936, 53; 1937, 67.)

129 SIR.—In October 1935, nearly six months before leaving East Africa, I sent an article, written in the field, which was published in MAN, 1936, 53, and is commented on by Mr. Wayland in MAN, 1937, 67. The tentative conclusions then reached were already profoundly modified by the end of the season, but I waited until the subsequent laboratory work had been completed before sending in a further article, so that it would be up to date. This second article was sent in October 1936, but has not appeared. Among other information, it gave answers to most of the points raised by Mr. Wayland, but I should like to reply, as briefly as possible, just to those points now.

Cromacian.—I should like to withdraw this name from circulation for describing our early flake material, for the following reasons: a second visit to the Kagera valley entirely altered our ideas on the large flakes in the rubbles lining the valley sides. Several new sites showed that there are really two such rubbles, differing considerably in age. In the older—'Rubble I'—we found many Early Chellean hand-axes as well as the flakes noted in MAN, 1936, 53. Some of these sites occurred at heights which coincided with a bench-like feature or with gravels which I equate with the *second*, or 200 foot - terrace. At these sites the tools were *undercolled*. The younger—'Rubble II'—undoubtedly post-dates this terrace—indeed probably post-dates the 100 foot - terrace valley-cutting—and contains, as Mr. Wayland points out, younger assemblages (without Chellean) of Acheulean, Tumbian and Levalloisian stages. Large flakes are nearly as common here as in the older rubble and I think that in both cases the flakes are only raw material or waste, primary flakes and not a distinct culture. However, Mr. Wayland has other evidence of the existence of a 'pure' early flake industry, and I am quite prepared to accept it.

In my first paper, I followed Mr. Wayland in regarding the M-horizon industry as Early Acheulean, but subsequent examination of comparative material from Kenya (Kamandusi River) and Oldoway shows, I believe, that the typical M-horizon industry (as distinct from derived material) is Middle Acheulean, comparable to Oldoway Acheulean III-IV.

There is no doubt that the N-horizon is a good deal higher than the 'M'. We dug three deep pits through the 100 foot - terrace down to the M-horizon, and in each case the 'N' was separated from it by a thick bed of current-bedded sand (up to 17 feet). In this sand we found three constant horizons containing Levalloisian—out first from these beds. The fourth Levalloisian horizon occurred in a stone-bed at the top of the current-bedded sands and at the base of a bed of alternate clays and fine, white sands, and in this same horizon with the

Levalloisian, were the crude hand-axes referred to, *cf.* the N-horizon. In the same bed, but above the N-horizon, were two more 'pure' Levalloisian horizons before the uppermost clay bed, containing developed Tumbian, is reached.

In several places (particularly along the riverward edge of this terrace), the post-M, pre-N-horizon sands were eroded before the N-horizon *bed* (stone-bed and succeeding clays and white sands) was deposited. In three of three pits, at right angles to the present channel, the post-M, pre-N-horizon sands thinned out respectively from 17 feet to 11 feet and finally to nothing, with the 'N' stone-bed resting on the latter, un cemented 'M'.

In several places we obtained well-shaped hand-axes in the clay above the N-horizon bed, but never the Tumbian pieces. In my first article, I called these hand-axes Upper Acheulean, but detailed study now shows that the Acheulean feeling is purely traditional: it is absolutely a part of the true Tumbian culture. Our work on the N-horizon material shows it to be proto-Tumbian, for we obtained many of the characteristic picks *in situ*. All the tools, it may be added, are strikingly like the majority of the Sangouan, and I believe that they belong to the same industry, and thus explain the presence of so much Levalloisian in the Sangouan, because the former is contemporaneous with the whole post-M-horizon series.

I cannot elaborate here, but I feel very strongly that the N-horizon represents only part of a very long depositional break which began in Middle Acheulean times, and that all the succeeding deposits belong to the period which, in Kenya, is called Gambian. This may be a shock in view of the presence of apparent 'Acheulean' in the post-M beds, but we must remember the well-developed Levalloisian and the Tumbian in them. I cannot see a trace of Levalloisian technique in the M-horizon, nor do I believe that it ever occurs in beds of similar, that is, Kamasian age. It is essentially a Gambian industry in its developed stages for it may have appeared in the dry interval between the Kamasian and Gambian, *cf.* the Naurykian.

The advanced technique of the Tumbian lanceolate and tranchets does not look like that of an early (or Kamasian) industry, but argues a long development which is certainly not local. Even in the Kagera valley we do not appear to have a complete development from the proto-Tumbian of the N-horizon to the real Tumbian of the upper clays. My belief is that a late Kamasian, Upper Acheulean stage in the Congo developed toward the Proto-Tumbian all through the Kamasian-Gambian interval, coming back to East Africa in the Gambian. In the Congo, the Tumbian certainly continues into the Neolithic with polished tools, but Dr. Leakey's statement to Mr. Wayland in 1932, that the Tumbian was a

Acheulean descent, makes his recent opinion rather curious (*Stone Age Africa*, p. 72), that all of it is of late (Gumban) Neolithic date.

O-horizon.—I quite agree with Mr. Wayland when he doubts the existence of this horizon. On examining our data, I saw that we had mistaken one of the upper sand layers of the N-horizon bed for another tool horizon with which the Tumbian appeared to be connected. It also appeared at first to be the same as the reddened zone referred to by Mr. Wayland, and we called it the O-horizon—mistakenly, as I have realized for some time. Accordingly, the only bed in which the true Tumbian could occur was the upper clay and I am, therefore, very pleased to know that Mr. Wayland has found it *in situ* in what must be this bed.

In my first paper I referred to the '150-200 foot' gravels of the top terrace. As Mr. Wayland points out, this is, indeed, the second terrace in the valley, as we settled on our second visit. But the reason why I referred to these gravels as belonging to the 150-200 foot terrace was because, at the places where they cut across the Chellean Rubble I, they are less than 200 feet above the river. In fact, the difference in height between the 200 and 100 foot terraces gradually decreases all the way upstream until, at Nsongezi, there is only 50 feet \pm between them. This is because the head of rejuvenation, when the 100 foot channel was cut, only reached a little beyond Nsongezi, and the subsequent lacustrine or swamp beds of the 100 foot terrace filled up this channel horizontally, from Lake Victoria up to and a little beyond Nsongezi.

T. P. O'BRIEN.

Polyandry and Sexual Jealousy.

130 SIR.—The role of jealousy in the regulation of sexual behaviour is of interest not only to the psychologist and sociologist, but also to the social reformer. According to several field ethnologists whose observations are summarized by Westermarck, *History of Human Marriage*, 5, I, 301-322, polyandrous people are believed to be remarkably free from jealousy. In the course of his investigations into the sociology of the *Irawas* of the Malabar coast of S. India a section of whom



FIG. 1. A POLYANDROUS MARRIAGE CEREMONY.

practice fraternal polyandry, the writer had the opportunity of testing the truth of the above generalization. An analysis of the various aspects of *Irawa* polyandry has been published by me in *Man in India*, xv (1935), p. 108 ff. Wherever modern European culture has penetrated and modified indigenous culture, polyandry is giving way to monandry, but on the other hand, in rural areas remote from foreign influences, polyandrous families are still numerous and are surprisingly free from jealousy and discord. The suppression, therefore,

of sexual jealousy between the brothers who are the common husbands of a single wife is a function of their culture. The chief cultural forces that lead to the suppression of the emotion in the men are (1) the ritual of marriage (fig. 1, which, I think, is the first photograph ever taken of a polyandrous marriage ceremony) by which they are made joint husbands; (2) the economic motive to prevent the disintegration of the family property by limiting the number of heirs; (3) the influence of parents who, during the earlier years of marital partnership, supervise and regulate the sexual life of the co-husbands by assigning each of them a particular night to be with the wife; and (4) public opinion which applauds successful polyandry. Under conditions of culture change all these social forces have weakened and in every family in which economic and other ties have been modified, bickerings are heard that have their root in sexual jealousy, growing individualism and rebellion against the authority of elders in sexual matters.

The evidence from one of the few polyandrous peoples of the world, thus points to the conclusion that sexual jealousy is, under certain conditions, capable of being repressed to a high degree, but the dangerous emotion reappears when its cultural inhibition is even slightly weakened. If it is so difficult to check jealousy within a group of three or four brothers brought up in polyandrous traditions, it is almost impossible to imagine as Russel does in *Marriage and Morals* that it will disappear 'if it is recognised as bad,' and people are educated to regard it as such.

A. AIYAPPAN.
Government Museum, Madras.

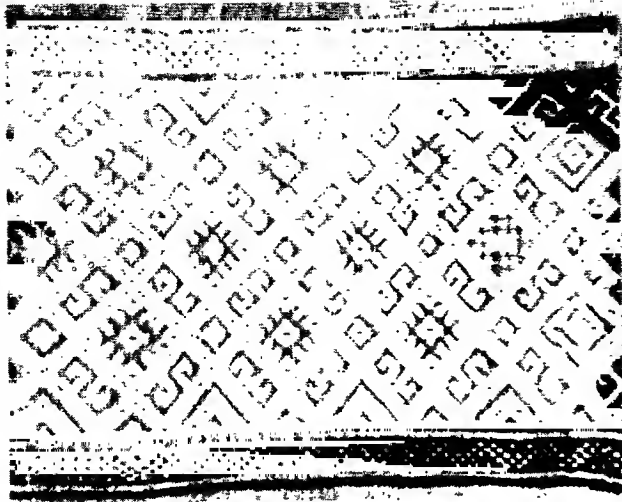
Stone Images from South America. (Cf. MAN, 1937, 53.)

131 SIR.—In response to Mr. G. Hemming's desire for the identification of two stone images from South America (MAN, 1937, 53), I would like to offer the following note: As Mr. Hemming rightly guessed, these two figures are not from Bolivia, but from Easter Island. They belong to the class of poor and cheap curios that present natives carve out of soft, disintegrated basalt. The actual value of these objects is two pieces of soap. Scores of analogous specimens are taken every year to Chile by the crew of the Chilean training ship *Baquedano*, and they can be acquired in any curio shop of Valparaiso for a few shillings.

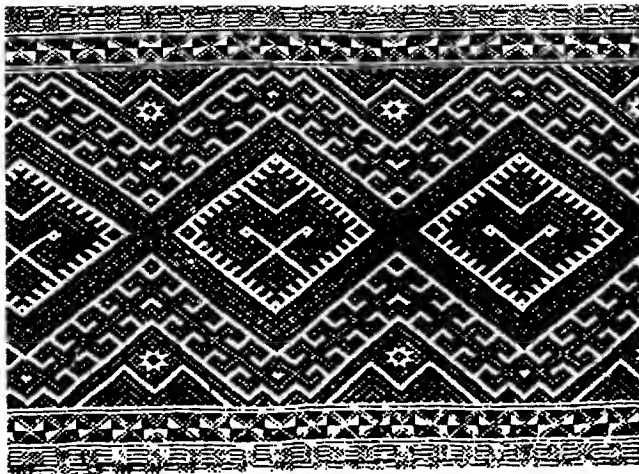
In this connexion it is worth remembering that the principal industry of Easter Island is the manufacture of curios which are traded for cloth or other commodities. With this flourishing activity, some natives combine the fabrication of fakes for the special benefit of archaeologists and collectors. The curios which are destined for the crew of the Chilean ship are decidedly tasteless and cheap, but the forged specimens show no little skill and ability. Often it has been hard for me to decide whether a purchased specimen was faked or legitimate. The curios and some few fakes flood Chile. Some of them reach the shops of continental art dealers to the great detriment of public and private collections. MAN (1923, 71) published a stone image from Easter Island which belongs to the class of curios. I tried, by giving the natives photographs of genuine specimens, to restore the classical tradition in the carving of images, but my endeavours were unsuccessful. They frankly admitted that, though these images were ugly, their customers were keen on them. Besides, they were unable to copy the proportions of the old models. Stone images of the type of those published by Mr. Hemming are a recent creation, and the natives do not make much of them, for they carve them more easily than the wooden specimens.

ALFRED MÉTRAUX.
Bernice P. Bishop Museum, Honolulu.

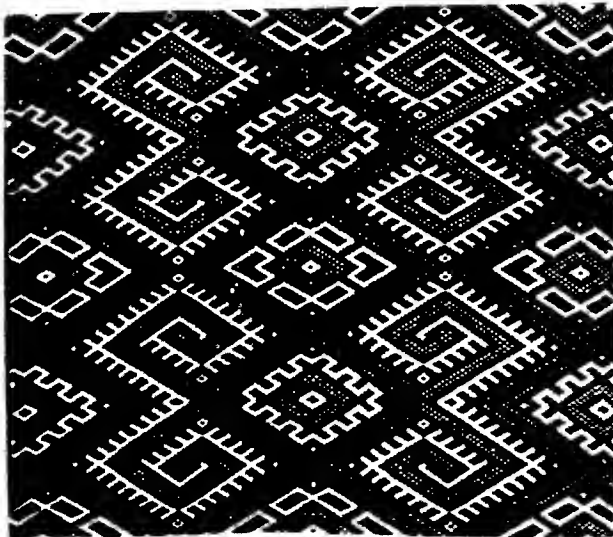
1a



2a



2b



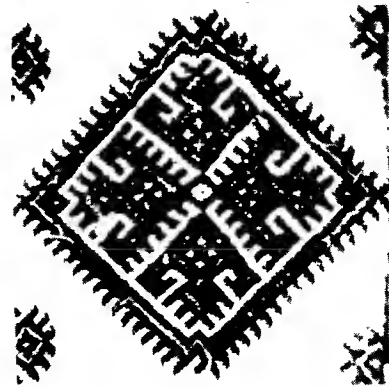
1b



3a



3b



ABORIGINAL TEXTILE DESIGNS.
(a) SOUTH-WESTERN CHINA (b) EASTERN EUROPE.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 132-154

JULY, 1937

ORIGINAL ARTICLES.

Technology.

With Plate G.

Schuster.

A COMPARISON OF ABORIGINAL TEXTILE DESIGNS FROM SOUTH-WESTERN CHINA WITH PEASANT DESIGNS FROM EASTERN EUROPE. *By Carl Schuster. Lama Temple, Haitien, Peiping, China. Cf. MAN, 1936.*

132 The accompanying Plate G shows a group of three aboriginal textile designs from south-western China, compared with three textile designs from the peasantry of eastern Europe.

A word about the Asiatic material. The designs of tribespeople like the Miao and I-chia of Kweichow and the Yao of Kwangsi, not to mention a great number of other south-eastern Asiatic tribes in Chinese provinces, on the island of Hainan, in Tonking, etc., are especially interesting for comparative study, since they largely represent a strain of 'geometric' ornament quite distinct in character from that of the surrounding higher cultures, but very close in many respects to a design repertoire current among the peasantry of eastern Europe, as suggested by the accompanying comparative examples. This 'geometric' strain is represented especially well in the embroideries of the so-called Ch'uan Miao who inhabit the region where the borders of the three Chinese provinces of Szech'uan, Kweichow and Yünnan join. Due to the energy of Dr. D. C. Graham of the Museum of West China Union University in Ch'êngtu, Szech'uan, and with the support of the Harvard-Yenching Institute, a very interesting collection of design material has been secured during the last two years from this region. Our Figs. 1A and 3A are reproduced here from Ch'uan Miao material by kind permission of Dr. Graham. These three designs are embroidered in 'weaving' stitch in blue cotton thread on white cotton cloth, to be used as head-bands and sash-ends. Fig. 2A, on the other hand, is from a cotton bedspread with black and white woven design purchased by the writer in the city of Kweilin, Kwangsi, in December, 1935. Unfortunately it was acquired in an ordinary old-clothes shop, so there can be no certainty about its provenance, but it is safe to say that it is non-Chinese, and it is probable that it is the work of the Yao who inhabit the so-called Yao Mountains in the vicinity of Kweilin.

It is interesting to compare these few specimens of aboriginal design from south-eastern Asia with a group of similar designs from the peasantry of Eastern Europe. The most striking of the analogies is probably that between Figs. 1A and 1B. In both cases we have a framework of diagonal lines meeting at an approximate right angle to form a series of lozenge-shaped compartments. These compartments are occupied in each case by a 'serrated lozenge'¹; while the diagonal lines of the framework are laid in pairs and hold between them a series of angular S-curves, which thus appear as if in association with the 'serrated lozenges,' four S's to each lozenge.

¹ It is difficult to find a satisfactory English name for this very important design-entity. The German language lends itself more satisfactorily to the task: 'Zinkenraute' is the term suggested in an essay by Dr. Arthus Haberlandt, *Ein altes Mustertuchlein aus Turfan (Zentralasien)*, Mitteilungen der anthropologischen Gesellschaft in Wien, liii, 1923, pp. 69-82, to which, incidentally, the reader is referred for some interesting sidelights on the present discussion.

The occurrence of so complex a design in two such widely separated regions, supported on both sides by numerous other analogies (with access to more material, they could no doubt be multiplied), merits our special attention. In eastern Europe the specific association of the serrated lozenge and the S-curves is by no means rare.² The significance of the fact that this motive complex occurs on both sides of the Eurasiatic continent is, I believe, that the association of serrated lozenge with S-curves must be regarded as a primary one, *i.e.*, one firmly rooted in an old tradition which is the ancestor of both modern forms. From the findings of certain other comparisons of an extensive nature, it is clear that these two

motives actually *belong* together, by virtue of a significant content which has long been obscured, and that the design goes back ultimately to a purely zoomorphic origin—that it represents, in fact, the central motive of a very old and widespread artistic tradition.

About the comparative pair, Figs. 2A and 2B, there is no need to say more than to call attention to the correspondence between the two examples of 'serrated' double spirals. Figs. 3A and 3B constitute another pair of cognates whose ultimate value for the establishment of a significant content of this design repertoire is perhaps equal to that of Figs. 1A and 1B. We have a valuable check for this motive in the common *Ferahan* design surviving in western Asiatic carpet tradition: it will be possible ultimately to show that nomad carpet-design is intimately related to the two peripheral folk-traditions here represented. Though the elucidation of these relationships requires further study and a more extensive form of presentation, it may be justifiable to publish these few pairs of motives here in order to call attention to a problem of considerable potential interest.

² Viz. G. Opreescu, *Peasant Art in Rumania*, New York and London, 1929, p. 89 (centre: the 'serrated lozenge' is here a sort of grid which, in the light of comparative material, is a perfectly feasible equivalent for it); 103 (bottom); 104 (upper right); 105 (lower left: the framework itself is here omitted, and for the 'serrated lozenge' we have a variant which invites an interesting comparison with Western Asiatic *kilim* design); also H. Th. Bossert, *Volkskunst in Europa*, Berlin, 1926, pl. XCII, 1.

THE LITERATURE OF HUMAN PALÆONTOLOGY: A REVIEW OF 'FOSSILUM CATALOGUS, PARS 74, HOMINIDÆ FOSSILES.'¹ *By G. M. Morant, D.Sc. Illustrated.*

133 Historians have hitherto devoted little attention to the statistics of publications. It might be admitted that the waxing and waning of sectional movements, and even the total cultural energy of a country, might be estimated in a general way from the output of its published writings at different periods. But no serious attempts to make such estimates appear to have been made, except in the case of the literature of very recent times. There are obvious difficulties to be considered in dealing with such inquiries, and ways in which the statistics could be made as precise as possible would have to be discussed. This article treats the material recently collected for a particular branch of anthropology.

The valuable services of the late Dr. Davidson Black to physical anthropology are now augmented, since he inspired the bibliography reviewed and aided the fund required for its publication. The foreword is by him and it is said in it that the work was prepared, under the critical editorship of Dr. Werner Quenstedt, in co-operation with the Cenozoic Research Laboratory

of the National Geological Survey of China. It was found that remoteness from large libraries seriously handicapped the researches of students in Peking, and a comprehensive catalogue of the literature would obviously be of great advantage to them. The book which has resulted from this need will also be indispensable to students in all parts of the world who require a first-hand acquaintance with the subject treated.

The arrangement of the material leaves nothing to be desired. It consists of publications dealing with fossil remains of man definitely known, or at one time believed, to be of mesolithic or earlier age. The literature is first arranged in the form of an alphabetical author catalogue, complete references being given and, where necessary, contracted annotations indicating the subject-matter in so far as the general subject considered is concerned. Selected items are marked as

¹*Fossilium Catalogus. I, Animalia. Editus a W. Quenstedt. Pars 74. W. et A. Quenstedt: Hominidæ fossiles. Dr. W. Junk: Verlag für Naturwissenschaften, 's-Gravenhage, 15. iv. 1936. Pp. 456. Price 34.50 Dutch florins.*

worthy of special note (*Erwähnen*). This section is followed by one dealing with the fossil skeletons separately from *Pithecanthropus* to *Homo sapiens recens*. For each the site, finder's name, year of discovery, synonyms for the most used title, indications of the parts extant,² their age and the collection in which they are preserved to-day are given. These particulars alone will be of great value for purposes of reference, and they are not to be found collected together in such a convenient form elsewhere. Following them there is a chronological list for each skeleton of the literature dealing with it, cross references to the author catalogue being made, and notes indicate the special part, or aspect, of the specimen dealt with. A *Geographischer Index* and a *Paläontologischer Index* complete the book.

The compilers of this bibliography aimed at making it cover all the writings of any scientific value dealing with the subject considered, from weighty monographs providing original descriptions of the fossils, and books dealing with the whole range of human palæontology, to reviews of these works and articles of a semi-popular character. This aim appears to have been achieved almost completely as far as writings in European languages are concerned (those in other languages not being considered) up to some date about 1930. Anyone acquainted with the literature knows that it is widely scattered in scores of scientific journals and other publications, and no one can hope to trace all the writings of a particular year until several years later. This compilation was completed in December, 1935, and the figures discussed below suggest that the entries for this and the two preceding years, at least, must be incomplete. In general, all editions of a book are given, but only one of Huxley's *Man's Place in Nature* is listed, although there have been numerous reprints of it since 1863 containing the essay "On some Fossil 'Remains of Man.'" There must, also, have been numerous articles concerned with the subject of a more ephemeral nature than any included.

It should be realized that quite a large proportion of the skeletons dealt with are usually considered to-day to be either of unknown age, or else to belong to post-palæolithic times. All the American specimens belong to this category, and some of them have evoked long-continued

discussions in print. For the Calaveras cranium, for example, there are 67 references ranging in date from 1867 to 1933. In considering the 'volume' of attention devoted to the subject it is clear that writings concerned with unauthenticated specimens ought to be included. The real difficulty in compiling statistics from the catalogue is to decide on a unit to use. The matter with which we are concerned ranges from single page articles, and single pages in books dealing with other subjects, to lengthy monographs on the human remains and books on them of 500 pages or more. It might be suggested that the unit used should be a page, but this would present a practical difficulty. In most cases where a publication is only concerned partly with human remains the pages of it which do deal with such material are given, but this is not so for all the publications. The unit which can be taken most easily is the single item entered in the catalogue, and this was actually used in compiling the figures shown in Fig. 1. Equal importance is

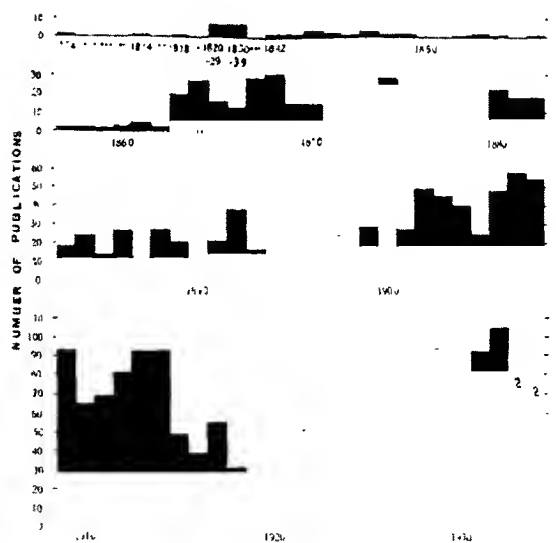


FIG. 1. STATISTIC OF PUBLICATIONS 1774-1934.

thus being given to an insignificant review or article and an original report of permanent value. This disparity may not mislead much, when our concern is with the secular development of attention paid to the subject, if it can be assumed that the publications of different sizes and values remained roughly constant in their proportions to one another on passing from year to year or

² Perhaps the English-speaking reader ought to be warned that OK denotes the upper jaw (*Oberkiefer*).

from decade to decade. This is not an unreasonable assumption to make; the proportion of insignificant to important contributions to the subject is quite likely to have been approximately the same in 1870, say, as in 1930.

Having decided that the unit to be counted is the entry in the bibliography, there are a few other points which have to be settled before the totals for each year can be found. These were dealt with in the following ways. The date of publication was used in all cases: if a part of a journal for 1928, say, was issued in 1929 the entry was made for the latter year. If, however, the only date given is 1928-29 then the entry was included in the total for 1928, and the same practice was followed in the case of works in several volumes, such as dictionaries, published in a number of different years. Unless listed separately, all the editions of the same book are combined in a single entry, and the same is true for a paper published in parts. The queried dates were used as given and a few entries for which there are no dates had to be omitted.

The numbers of publications compiled, in the way described, from the author catalogue of the bibliography are shown in the first chart. It is only suggested that this gives an *aperçu général* of the growth of the subject, and no significance should be attached to a small difference between the totals for different years. Its early development is seen to have been extremely slow; the average for every decade before 1860 is less than two publications a year. It is clear that the study of fossil human remains received an impetus which appears to have been sudden in 1863, four years after the publication of the *Origin of Species*. This was the time when modern conceptions were beginning to be established, and anthropologists in general were beginning to be prepared to find evidence of archaic human varieties and to acknowledge their high antiquity. Anthropological societies were founded in the early sixties, or shortly before, in Paris, Berlin and London, and the importance of prehistoric archaeology was at last recognized. There were no sensational new finds at this time, but the significance of some of the skeletons previously preserved—and in particular that from Neanderthal—began to be widely discussed. The new movement appears to have maintained its own, with rather marked fluctuations in the yearly output of its literature, until 1874, and then the initial spurt was

apparently spent. But the subject had clearly been established, and it only needed new discoveries to create a wider interest in it. This was evident when, 20 years later, the importance of the *Pithecanthropus* remains was first appreciated widely. In 1895 the publications suddenly rose to a total of 63, which is more than twice as many as that for any previous year except 1892, for which the total is 37. Among the 63, 33 of the publications issued in 1895 deal with *Pithecanthropus*. By this time any new discovery of note was sure to be widely discussed immediately after the date when sufficiently full particulars of it had been circulated. And as many new funds were forthcoming, thanks to the ever-increasing activities of the archaeologists, so the scope of human palaeontology grew rapidly. This continued to be the situation until the War called a halt. The output for 1914 seems to have been little affected, but thereafter there was a marked decline until the nadir was reached in 1919. It should be remembered that American publications are included. For 1919 the total is 28, a lower figure than that for 1868, but there was a remarkably regular recovery until a new maximum (of 112) was reached in 1926. The fact that this was followed by a decline may be attributed to the economic depression which restricted funds available for publications. The number for 1935 is not shown on the chart; it is 27, which is probably about a quarter of the value which would be obtained from the total publications for the year. The numbers shown for 1934 and 1933 must also be supposed much too small on account of the fact that it was impossible to collect references to all the literature published shortly before the compilation was brought to a close. Interest in fossil human skeletons has certainly not declined in the past two or three years, and it is quite likely that a new maximum has already been reached. The yearly output of the literature is now so large that no one can hope to make himself acquainted with the whole of it; the specialist is obliged to select as judiciously as he is able to.

The total number of entries shown in Fig. 1, together with the 27 for 1935 not shown there, is 3,050. Many of these cannot be supposed to have been finally judged and assimilated yet by those who are especially concerned with the subject, but the student is continually asking for more. There are as yet no complete reports on

the La Ferrassie, Mount Carmel, Saccopastore (Rome) and London specimens, although these have been available for study for some years, and among more recent finds as yet undescribed in detail the specimens from Java, the Swanscombe and the latest *Sinanthropus* skulls are of major importance. The material is accumulating rapidly and new evidence will doubtless settle many old controversies and call forth new ones.

Statistics of the publications may also be used to examine the changing interest taken in individual skeletons. It appears from the bibliography reviewed that the *Pithecanthropus erectus* I and the Piltdown specimens have been discussed more extensively than any others. There are totals of 522 references given for the former and 317 for the latter, and the distributions of these in years are shown in Fig. 2. It should be

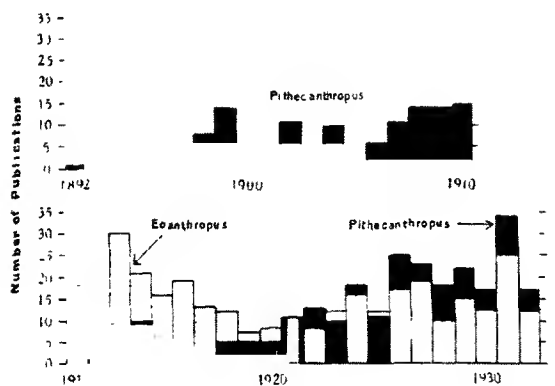


FIG. 2. STATISTIC OF PUBLICATIONS 1892-1932.

realized that a unit entry there (taken from the second section of the book) has a different significance, on the average, from a unit entry in Fig. 1 (taken from the author catalogue). This is so because a single publication may deal with several specimens, and there will be an entry

under each in the lists of references given for them. The first account of the *Pithecanthropus* skull-cap appeared in 1892, and it was not until three years later that its importance appears to have been made widely known by the issue of 33 descriptions and discussions of it. General interest appears to have waned rapidly until the increased attention attracted to the subject as a whole, which became apparent in 1908, called forth re-considerations of what was then by far its most important material. Shortly afterwards attention was diverted to the newly described Piltdown skull, and the discussions and controversy which it evoked were, in spite of the War, more sustained than those which followed the original description of *Pithecanthropus*. After the interval of 20 years there were far more anthropologists ready to examine in print an important new find. The two sets of frequencies compared in Fig. 2 show a remarkable regularity. From 1913 to 1920 the Piltdown skull held the field; in 1921 the two frequencies were equal and they remained practically equal until 1925; for every year from 1926 onwards *Pithecanthropus* received more attention than his (or her) rival, and it must now be considered the more important fossil.

The reader who has examined Fig. 1 may have wondered what the earliest publications—before 1820, say—are which can claim a place in a bibliography of human palaeontology. The entry for 1774 is a book by J. F. Esper describing bones found in a cave at Gailenreuth, near Bayreuth. The fragments of a human skeleton among them are now considered to be of unknown age. The same must be said of the specimen from Guadeloupe, described by König in the *Phil. Trans.* of the Royal Society in 1814, and of the Cannstatt fragment first referred to by Jäger in 1818. Buckland's account of the "Red Lady" of Paviland in the *Reliquiæ Diluvianæ* (1823) appears to be the earliest of any human skeleton which is accepted to-day as palaeolithic.

AN EGYPTIAN MIRROR HANDLE IN FOSSIL BONE. By D. E. Derry, M.C., M.B., Ch.B., Cairo. Illustrated.

134 When Mr. Guy Brunton was excavating at Gau, Upper Egypt, in the season 1922-23 (*Gau and Badari* III), he opened a burial pit of the First Dynasty which was filled with petrified animal bones, mostly hippopotamus, and fragments of three human skulls, as well as

other bones of the skeleton also mineralised. As the pit contained Eighteenth Dynasty carved ivory objects, mirror handles, spoons, &c., I went through the whole collection of the bones with the object of ascertaining whether any of them showed signs of having been employed as material

in the manufacture of such articles as those found in the pit. Nothing of the sort was discovered, but shortly after my return to Cairo, Major R. G. Gayer-Anderson, to whom I had described this remarkable collection of fossil bones, showed me the broken half of a mirror handle which had been in his possession for some time and which by a strange coincidence proved to have been fashioned from the petrified bone of some animal.

The mirror handle is shown from the inside in Fig. 1 and from the outside in Fig. 2. In the former the cancellous tissue of the bone is well seen. But for the fact that the handle is broken it is questionable whether it would have been diagnosed as bone. Its weight and consistence suggest stone, while the beautiful polish and grain of the outer surface resemble walnut.

The provenance of this interesting fragment is unknown and as no example of a mirror handle in fossil bone is to be found in the large collection preserved in the Museum of Antiquities in Cairo, it seems worthy to be placed on record.

Major Gayer-Anderson most kindly gave me the mirror handle and it is at present in my possession.

THE SIGNIFICANCE OF THE OOLITIC LIMESTONE ESCARPMENTS IN THE LIFE OF BRONZE AGE FRANCE. *By Margaret Dunlop. Abstract of a Paper read at the British Association's Meeting, Blackpool 1936.*

135 The grouping of Bronze Age finds in France is such that one can discern three types of environment, viz. maritime, riverine, and plateau. The first group predominates in the early and late Bronze Age, the riverine assumes importance again and again, and in the middle Bronze Age particularly, while with the advent of cooler and wetter conditions in the ninth century B.C., the forest-free plateaux, and the Oolitic limestone ridges in particular, are significant in the distributions of certain objects of material culture.

As regards habitability, the Oolitic ridges, stretching from the Charente in a great curve through Champagne, to the southward termination of the Ardennes, with southern branches in the Jura, represented an area of primary settlement with longitudinal areas of forest-free pasture, although their slopes and fringing valleys of Lias clays would be and still are densely forested.



FIG. 1.

FIG. 2

AN EGYPTIAN MIRROR HANDLE IN FOSSIL BONE.

The Jurassic limestones abut on the Jura and related Swiss province of the Western Alps in the east, and reach the Atlantic between the Gironde and Breton Bronze Age agglomerations. The belt is significant as a way of exchange in an area characterized by extensive and intensive developments of trade. The value of the limestone to the hunters of the Palaeolithic is well known. The honey-coloured flint of Grand Pressigny (Indre et Loire) has been found in Brittany, Belgium, the Jura, and recently in Provence. The spread to the last two centres, which was

continued in the Early Bronze Age, would seem to be related to the Oolitic escarpment. Camp de Chassey arrowheads were probably evolved in contact with Alpine influences, and were disseminated in what is now France by the same means.

In the Æneolithic and early Bronze Age maritime trade was of great significance, and the north-west coastal region woke up to intercourse on an unprecedented scale. These maritime, and more especially Breton, connections appear soon to have been supplemented by the development of a route from the Rhone mouth to the Gironde, which latter became very important in the late phase of the early intercourse, and was no doubt helped by the salt deposits of the western Pyrenees. Continental intercourse may be indicated by the fine stemmed flint arrowheads which are very numerous in France, and later, by all except some Breton types of beakers.

With the exception of salt, the valuable commodity of trading communities, there are few, if any, metalliferous deposits of Bronze Age significance on the Oolite. Cultivation was extended in the Bronze Age optimum to greater altitudes than at the present day and the Jura salt reserves came to have special significance among a mainly vegetarian agricultural people.

Calcareous rocks, because of their porosity, rarely support dense forest, even under the most favourable conditions, although the Oolites are more susceptible to tree growth than the chalk. This, however, was a period of desiccation for the most part, and the French Jurassic ridges rise to considerable heights. A scanty tree covering is therefore likely. Towards the end of the Bronze Age, *i.e.*, c. 700 B.C., when the Twilight of the Gods, the Fimbulwinter of the German Edda, with its cool damp weather, gradually overtook Europe, vegetation growth and the deposition of acid humus was rapid, and the calcareous ridges came to have a peculiar significance in a period of uncertainty, of invasion, and of conquest.

We should not then expect the Jurassic limestone ridges to gain early prominence while maritime intercourse was predominant. Their habitability is emphasized in the middle Bronze Age when interior commerce develops by means of the ridges and rivers, and they emerge from isolation in a belated Neolithic phase behind a

barrier of dense damp oakwoods and coniferous forests, to become a highway of trade across Central France and vie with the Channel shores as an outpost of European civilization. The littoral may be said to be Atlantic in type, with an industrial and maritime basis, the other Central European in outlook, and apart from a considerable development of salt-mining later, agricultural. In the late Bronze Age and early Iron Age, the ridges became a refuge from invaders from the north-east and east, by whom they were eventually conquered and valued for their warm soil and good drainage. By 450 B.C. an outward spread from the Oolites was in progress, as the result of climatic amelioration.

The distributions of type axes, in view of their overwhelming preponderance in the Bronze Age, may be taken to demonstrate fluctuations in the significance of the Oolites. Flat axes are of negative value. The axe with raised lateral edges is probably Central European in origin, and the idea may have been carried along the calcareous ridges to what became a centre of manufacture in the lower Gironde. The palstaves were a typically Atlantic variety in France, though inland spread along the more readily navigable estuaries is common. The median-winged axes and bronze sickles of roughly the same period are contrasted with the Atlantic group in that they have an east interior rather than a peripheral distribution. The socketed celts of Bronze IV were widespread, with Atlantic France and the Cotentin peninsula once more dominant, with the reorganization of cross-Channel connections. They were probably taken down the Rhine and along the Channel coasts from their North Central European centre of evolution, and only to a very minor degree through Central France.

The major Bronze and early Iron Age cultural spreads affecting the French Oolites are tabulated in fig. 2.

The Oolitic ridge is significant in that it tends to take out to the Atlantic Central European influences, when these, enriched by the trade of the amber route, have attained great significance. In particular, the features of the important West Alpine forms are disseminated along it. It gives opportunities for the development of something unique, and not merely for an extension into the boundaries of present-day France of a non-autochthonous culture, *e.g.*, of the North

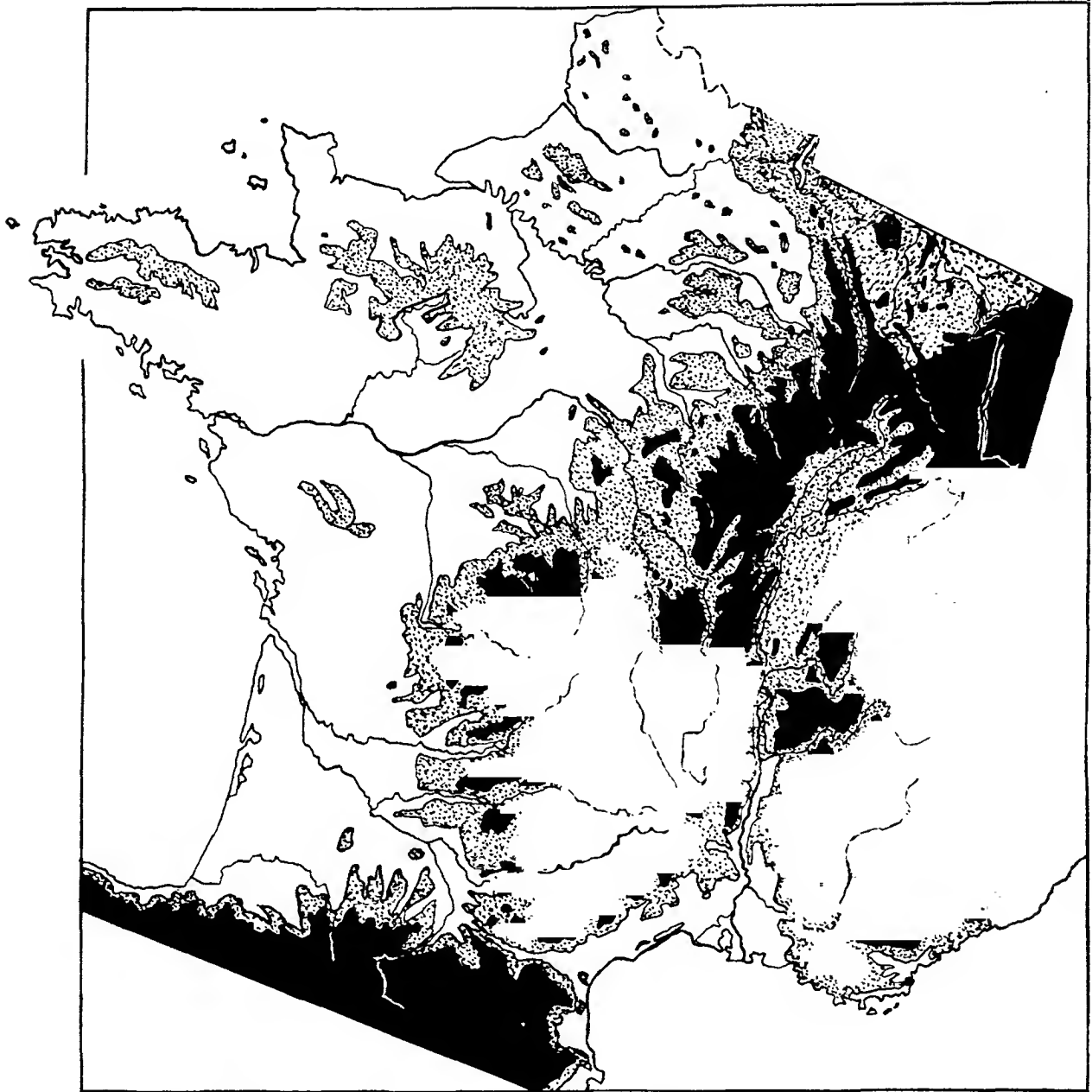


FIG. 1. SKETCH MAP OF FRANCE, SHOWING AREAS ABOVE 600 FT. (STIPPLED) AND ABOVE 1000 FT. (BLACK).

Scale about 1 : 5,000,000.

European loess, as in the north-east, of the Breton province of the north-west, which, although great, was very closely linked with western Britain, or of the Swiss Lake Dwelling culture which had its western outpost in Savoy. It is a natural region imposing topographic restrictions upon those utilizing it for trade and

habitation, and may therefore be said to be a distinct, though secondary, cultural province in the life of Bronze Age France, and a feature of vital importance in the maintenance of exchange and some semblance of organization during the unsettled conditions of the Hallstatt phase of readjustment.

DATE: B.C.	CULTURAL SPREAD.	CHARACTERISTIC WEAPONS.	AREA OF INFLUENCE.
c. 1750	Infiltration from the Rhine valley and South Germany.	1. Large broad triangular dagger based on flint counterpart. 4-6 rivets. 2. Flanged axe.	Jura, Dauphiné, South of Hautes Alpes. Down Rhone to Vienne. (Forest: Vienne to Avignon.) Westward to Saône only. (Pastoral people, and valleys heavily forested.)
c. 1400	Invasion from South Germany and Bohemia.	1. Dagger with blade with two rivets, narrowing to a trapezoidal base. 2. Simple sword.	Jura, Charente. Also S. to Gard and S.W. to Puy-de-Dame. Many thousands of tumuli in Côte d'Or and Jura of this period. (Inhumation with extended skeleton.) N.W. to Calvados (Minnig). Hérault Oolites important.
c. 1200	Invasion and infiltration from North European plain and Rhineland.	1. Rivetted pistiliform sword. 2. Winged lance with eyelet holes at base of wings. (Slits replaced by rivets in Doubs and Jura (secondary group).) 3. Terminal winged axe. (Hybrid between palstave and median winged type: cross fertilization of ideas at trade centres on Oolite.)	Sword to Aube and Marne (common in Paris basin). Terminal winged axe to S. Brittany. Inhumation still frequent.
c. 850	First Hallstatt invasion into Franche Comté from South Germany and Western Austria.	Short bronze sword. Considerable ornament. (Spirally coiled antennæ, probably developed first in Eastern France or on Swiss plateau).	Apart from a few riverine hoards, remarkable coincidence in unsettled period with Oolitic outcrop. Earthen tumuli.
c. 600	Renewed invasions from similar source. Greater stability towards 450 B.C.) (Early La Tène.)	Iron sword with bronze rivets. Hilt terminating in double circle.	Well distributed as above. Increase in population. Chief concentration around iron mines of Chatillonais (N. of Côte d'Or.)

FIG. 2. TABULATION OF CULTURAL SPREADS IN BRONZE AGE AND EARLY IRON AGE.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

The Torguts of Etsin-gol. *Summary of a Communication presented by Dr. Gösta Montell.*
136 4 May, 1937.

During the years 1929-1930, Dr. Montell was directing the ethnographic research of Sven Hedin's expedition to China and Mongolia. Observations made in the course of a two months' visit to the Torguts of Etsin-gol in 1930 were interspersed with a few data from Eastern Mongolia, especially from Chahar, Sunit, Durbet and Darkhanbel. The lecture dealt exclusively with the material culture, community life, and manners and customs of the people.

To learn the characteristics of the original Mongolian culture it is necessary to disengage the outer layer which Tibetan and Chinese influences have added during recent centuries. Practically all activities connected with stock-raising, with the construction and furnishing of the tents, and with the preparation of food, can be attributed to the old indigenous culture. To this also belongs the art of working sheep's wool into the felts which cover the framework of the tents.

The oldest Mongolian culture must have been entirely dependent on the products of the herds. Even to-day milk, butter, cheese, and meat form the

chief ingredients in the diet. It appears certain, however, that a barter trade with agricultural neighbours sprang up very early. The Mongols supplied live-stock and wool and received in return tea, meal, and cloth. It is a remarkable fact that the art of weaving seems never to have been acquired, although spinning yarn on a distaff is generally known. One may suppose that hides, and perhaps also felt, were used for clothing at a more primitive stage of Mongol culture.

There are many vestiges of the pre-lamaist religion, some of which are expressed in strict tabus. The ancient worship of rocks and mountains can still be detected, and in the institution of the *gurtum* purely shamanist traits survive. Scapulimancy is especially frequent. In the marriage ceremonies, sports and games, music and folk poetry, are numerous early elements.

During the last decades the Mongols have been subjected to strong influences from without, and their culture is very likely to undergo rapid and significant changes. In many border regions they have already been forced to adopt agriculture and a sedentary mode of life, while elsewhere they have been driven away and impoverished through the advancing Chinese colonization. The Soviet régime in Outer Mongolia has involved a fundamental alteration of conditions in that part of the country. But in the Egsin-gol area, Mongol traditions have been able to continue, up to the present, relatively undisturbed.

Among Nuer and Koma Tribes of the Upper Nile. *Commentary on a Film shown by Mr. Frank Corfield on 15 June, 1937.*

137

The film was taken during the course of a four-year tour in Nasir District in the Upper Nile Province of the Anglo-Egyptian Sudan that ended in November, 1935. The eastern boundary of this district runs for some 250 miles along the international boundary with Abyssinia. In the north it lies close under the high mountain plateau of Abyssinia.

The small area which lies between the mountain massif on the east and the vast low-lying swamps of the Upper Nile is inhabited by a small conglomeration of people only some 5,000 strong.

They speak three distinct languages and, for want of a better name, are called Koma, a word the Galla use when referring to them. Little is known of them and they are but the pitiful remnant who have managed to survive some generations of raiding from the Galla on the east and Nuer on the west.

But the main portion of the film depicted the Jekain section of the Nuer Tribe, the largest branch of the Nilo-Hamitic family that inhabits the inhospitable swamps of the Upper Nile. Although the Nuer cultivate a reasonable amount of crops their chief interest lies in their extensive heads of cattle. They are semi-nomadic, and the whole cycle of their life is regulated by the seasonal movements of their cattle.

Scenes were shown covering most of their activities,

and they illustrated well the type of country in which they live and the difficulties of environment which both they and those that hope to administer them have to overcome. They were seen on their annual migrations, in their dry weather cattle camps, tending the cattle, and fishing and dancing. Some of the types of game that inhabit their country were shown including the very rare Nile Lechwe or Miss Gray's Cob.

Ethnology under Glass. *Summary of Presidential Address delivered by Dr. H. S. Harrison, 29 June, 1937.*

138

If we divide mankind into two main categories, those who live close to the soil, and those who live close to the pavement, the ethnologist belongs to the one, and pursues his own image through the other. If he is a museum man, working in an atmosphere of 'specimens' and labels, he is in course of time conditioned to his glazed environment, and becomes of necessity museum-minded. He looks upon the objects in his charge from a point of view which differs from that of his colleague, the field-ethnologist, who provides him with much of the information that may help him to a wider outlook. But in any case his immediate concern is to make the best of his material, in respect of its preservation, study, and display. In its arrangement he can sometimes choose between the two main alternatives of the ethnological and the ethnographical systems. If the former is his choice, his scheme will include comparative, distributional, and evolutionary sections, though ethnographical groupings need not be entirely lacking, as, for example, in the case of decorative art. Magic and religion, instruments of music, currency and money, and some other types of objects, will help to illustrate the close association between the material and the non-material sides of human culture. Whichever of the two main systems is adopted, opportunities may be taken of illustrating such theories or methods of approach as Diffusion, Culture Areas, and Kulturkreise. Evolutionary series may be attempted, though here so much depends upon hypothesis and inference that caution must be exercised, and a background of warning colours is appropriate. The facts and principles of social organization, being relatively volatile and fugitive, do not lend themselves to imprisonment and discipline under glass, though points of contact need not be altogether wanting. In spite of this unavoidable deficiency, museums are not to be regarded merely as synoptic mazes, made free as well as safe for democracy, but also as capable of playing an essential part in the study of our subject, as of others. Material objects are the only tangible representatives of alien reality that the student can examine, and, apart from their own technological and cultural significance, a practical training in the morphology of artefacts will form a concrete basis for the more elusive teachings of the sociologist. A National Museum of Anthropology is long overdue, not least for the stimulus it would afford to the study of the native peoples of the Empire, whose

governance demands not only power, but such sympathy and tact as must depend upon a detailed knowledge of their social and material culture, as well as of their social psychology. There is a tardy but increasing recognition of the value of this knowledge to administrative officers, and the anthropologist is anxious to collaborate in the movement for extending less arbitrary and dogmatic methods of conciliation than that of blood-letting, now, it may be hoped, approaching obsolescence.

Applied Anthropology Committee.

139 The Council of the Royal Anthropological Institute has constituted a Standing Committee on Applied Anthropology, which will meet at regular intervals for the discussion of problems of culture contact and the application of anthropological knowledge to the government of subject races. The committee will seek to stimulate popular and official interest through the publication of articles in MAN, representations to colonial Governments through the Colonial Office, and personal contacts with officials. It will endeavour to further the organization and systematization of research in this field, by means of discussions within

the Committee and with experts who have been engaged in research and by enlisting the co-operation of potential fieldworkers in accordance with a considered plan. The advice of persons in practical contact with native life will be sought in formulating such plans. Typical questions on which research might be encouraged are: Programmes of 'popular' or 'village' education in their relation to the actual circumstances of native life; the attitudes of various European agents towards sorcery with reference to native beliefs and practices; the evolution of native law, particularly among mixed populations; the effects of migratory labour on village organization; the evolution of squatter communities; the development of new religious cults; modern modifications in the functions of native political authorities, and their relations with their subjects; the effect of various systems of taxation on native economic life.

The committee will also organize discussions tending to the elucidation of various theoretical concepts belonging to this particular aspect of anthropology, with regard to the use of which there is at present little agreement, such as 'cultural stability,' 'cultural disintegration,' 'cultural reintegration,' 'detrribalization.'

REVIEWS.

INDIA.

The Katkaris : A Sociological Study of an Aboriginal Tribe of the Bombay Presidency. By A. N. Weling. *The Bombay Book Depot, Gurgaon, Bombay, 1934. 156 pp., xiv plates. Price 6s.*

Indian anthropology is still shy and backward. A great impetus was given to it when, at the suggestion of the Royal Anthropological Institute, the Government of India conducted an extensive ethnographic survey of India at the beginning of this century. It was expected when this preliminary survey was completed some years ago that monographic studies of the various tribes would be undertaken from the point of view of the sociologist, but this hope has not been fulfilled except for parts of Assam and Chota Nagpur, thanks to the labours of Dr. Hutton, Babu Sarat Chandra Roy, and Mr. J. P. Mills. Therefore, this little book which is a serious attempt to study the sociology of an interesting tribe of western India by a young Mahratta scholar is a welcome addition to the scanty literature on the subject. The Bombay University and Dr. Ghurye deserve our thanks for the help that they have rendered the author for the publication of his book.

The Katkaris are one of the backward tribes of the Bombay Presidency unjustly labelled as a criminal tribe for administrative convenience (a practice which is, unfortunately, followed in other provinces also). Leaving aside the traditional means of obtaining livelihood on the outskirts of the jungles, they are making a bold bid for surer ways of living near the towns and in rural villages, taking to agriculture, fishing, charcoal making, in fact, anything that adds to their scanty resources. In the course of this change in their economic life the usual process of standardization which could otherwise be called 'Hinduization' is also going on at a rapid rate. When dealing with a tribe that is living amidst a multiplicity of Hindu castes, a proper understanding of the working of their institutions is possible only if the 'social

'environment' or the caste environment is clearly described with its action and reaction on the community that is studied. In this respect the method of presentation of descriptive material on most of the Hinduized tribes of India will have to be somewhat modified from the usual systems that are suited for isolated tribes elsewhere. Mr. Weling, therefore, begins with a sketch of the 'Geo-graphical and social environment'; because of the lack of uniformity in the latter in the various localities where Katkaris are found, the author gives us only a very brief account of it. A map showing the distribution of the Katkaris would have helped the understanding of this part of the subject much better. Chapter II on 'Physical Affinities' is rather crude in giving a few averages of measurements in such a way that the physical anthropologist could make little use of them; the descriptive somatology also is done in an unorthodox manner. The economic activities of the people are dealt with fully in the next chapter. The author has collected statements about family budgets, per capita wealth and income, etc., which the student of rural economics will find quite useful. The changes that are taking place in rituals connected with marriage, death, etc., are also carefully recorded. In Chapter VII on 'Arts and Sciences,' one finds Katkari versions of Hindu myths. Mr. Weling concludes the little book with a prophecy that the Katkari would be "a useful addition to the village community," no longer dangerous to the community, though officially a criminal to the administration.

The book is marred by misprints in many places and very close packing of details without sufficient theoretical explanation which is essential to understand their true meaning. But when we remember that the author had to contend against official antipathy and work under very difficult conditions, he deserves our congratulations for what success he has achieved.

A. AIYAPPAN.

Explorations in Sind. By N. G. Majumdar, M.A. (Memoirs of the Archaeological Survey of India, No. 48.) Delhi, 1934. 172 pp. Price 27s. 6l.

141

The epoch-making discoveries at Mohenjo-daro have turned the eyes of the world upon the hitherto neglected Indus valley. The history of India has been carried back to the fourth millennium B.C., and she has now taken her place alongside of Egypt, Mesopotamia and Crete, as one of the cradles of the great prehistoric cultures of the world. But Mohenj-daro could not have been the sole site of the period in the Indus valley. The chalcolithic civilization of which it was one of the centres must have been spread over a wide area, as was proved by the excavations at Harappa, over four hundred miles away. This was further confirmed by the surveys of Kelat and Baluchistan by Mr. Hargreaves and Sir Aurel Stein.

The present memoir embodies the results of two journeys of exploration in Sind, in the cold weathers of 1929-30 and 1930-31. These investigations showed that an extensive area of prehistoric culture existed between the Khirthar Range and the Indus. The country must have been much more densely populated than at present, and both rainfall and climatic conditions must have been more favourable. The area was gradually deserted as desiccation drove the inhabitants to seek more congenial habitations. There were three classes of settlements: those in the foothills, on the river bank, and round lake Manchhar, but none of them evolved an advanced and wealthy civilization like that which later sprang up at Mohenjo-daro. The remains consist almost entirely of pottery. This falls into two types—the thin pale ware, of buff or light red clay with geometric patterns, which was first found at Amri and a number of sites in the hills of Western Sind, and the black-on-red variety which is associated with Mohenjo-daro. The two types represent two phases of the Indus valley culture. The ceramic remains of Baluchistan belong to a distinct group by themselves.

Mr. Majumdar thinks that we may infer, from the pottery and other evidence, that there was an earlier migration into the western highlands and thence into the Indus valley, but that the Mohenjo-daro remains point to a people who had settled down for a very long time, and had developed their own highly individualized art and culture. Mr. Majumdar's researches also threw a flood of light upon prehistoric lines of communication between Sind and the outer world. He shows that the ancient route through the Makran and the Las Bela State crosses the Hab river at Hab Chauki, and runs via Karachi to Tatta and onwards. This was the route followed by the Arab invader Muhammad Kasim in the eighth century A.D., and by Alexander the Great on his return journey. Other prehistoric routes to Baluchistan are still followed by Brahuis, Baluchis and other nomads.

A degenerate form of the Indus valley civilization, found at Jhukar and Lohumjo-daro and some sites on the Manchhar Lake, marks the decline of the period. The pottery of this period is black and of the 'bell-beaker' type, and has affinities with specimens belonging to the Early Iron Age, found at Huttanahalli, near Bangalore. Between this and the earliest Buddhist remains there is still a great and unbridged gap.

This important and scholarly monograph is illustrated with the excellence and profusion which we have learnt to associate with the publications of the Archaeological Survey of India, and it shows that the younger generation of Indian archaeologists, brought up in the Marshall tradition, is equally proficient in fieldwork and exposition. H. G. RAWLINSON.

Dual Organization in Assam. By J. K. Bose. Reprinted from the *Journal of the Department of Letters*, Vol. XXV; Calcutta University Press, 1934. 29 pp.

142

In this short paper Mr. Bose seems to be on firm ground in applying the slippery term 'dual organization' to the four Old Kuki tribes which he has studied at first hand: the Anal with eight clans to each moiety, the Lamang with four, the Mantak with two phratries, and the Amol with two phratries of two clans each. The Marring Naga scheme, with its senior and junior endogamous branches, its two territorial divisions also endogamous, and its four groups of three clans each is interesting, though it does not fit in with Rivers' definition of dual organization. It is to be hoped that Mr. Bose will publish his evidence more fully in book form, with maps and genealogies. Most of the other instances of dual organization which he enumerates require and deserve closer investigation. In rendering proper names in Roman script the barbarisms of English phonetics should be avoided. F. J. RICHARDS.

The Mahābhārata: an Ethnological Study. By G. J. Held, Ph.D. London (Kegan Paul) and Amsterdam, 1935. viii + 352 pp.

143

After a short survey of Indian epic research, and review of the critical views of Lassen, Sorensen, Weber, Ludwig, Dahmann, Levi, and Washburn Hopkins, Dr. Held propounds his own thesis, reconstruction of 'epic' culture, involving an ethnological emendation of Senart's theory of caste, and application of the study of nature, myths, symbolic rituals and notions of cosmic order, to the interpretation of the main ideas implied in the Mahābhārata. Other chapters deal with tribal sanctuaries, games of chance and potlatch. The author works out his theories ingeniously, but he must expect to be handled by critical specialists much as he has handled them. J. L. M.

GENERAL.

British Calendar Customs: Scotland, Vol. 1. Movable Festivals, Harvest, March Riding and Wapynshaws, Wells, Fairs. By Mrs. M. Macleod Banks, President, of the Folk-Lore Society, with a preface by the Rev. Canon J. A. MacCulloch, D.D. London: Published for the Folk-Lore Society by W. Glaisner. 1937.

144

The title-page of the work before us, here transcribed, serves also as a table of contents. Canon MacCulloch very justly observes, at the end of his preface, that it is "a book to give pleasure to all readers, and to rejoice the heart of the scholar." The reviewer, however, finds it hard to deal with a bare collection, derived from many sources, of details of recorded folk-customs at Lent, Easter, Harvest and at the other centres and

manifestations of Cult and Custom above enumerated. What can he do more than to commend the industry and accuracy of the compiler?

Such a work is a necessity. These customs are disappearing fast, and they will never be seen again. It is indeed earnestly to be hoped that they will be allowed to rest in peace, and be spared the absurd play-acting indignity, too common in these days, of spurious artificial revival. The world has passed them by. These times of ours are dominated by science, the motor-car, and the cheap tripper, for better or for worse; and, in such an atmosphere, mediævalisms, however aesthetic, are no more viable than the Diplodocus.

Get them recorded as quickly and as fully as possible, and then let them go. To a friend of my early days,

who was privileged to know George Meredith, that great man once remarked, "Humanity is all very well; but "humanity amusing itself is a degrading spectacle!" Many a time has the truth of that saying impressed itself upon me, since I first heard it: and it returned to memory when I read these records of organized cock-fights in schools, and of ferocious football orgies rather than games, associated with the Lent and Easter seasons. We contemplate the disappearance of such things without the faintest sigh of regret.

The melody on p. 104 should have been printed in the key of D throughout, beginnings: —, | 5.1 : t | etc. But in any case it would have been better to present it in staff notation; the tonic sol-fa does not adequately express modal tonality.

All concerned with the important and complex subject of Calendar and Seasonal folklore—and not in Scotland only—will find this careful compilation quite indispensable.

R. A. S. M.

Nutrition Policy in the Colonial Empire. *Despatch from the Secretary of State for the Colonies, dated 18th April, 1936. London: (Stationery Office, Colonial No. 121), 1936. 8vo. pp. 8. Price 2 pence.*

The Prime Minister has had under consideration the question whether there are any steps which might be taken at the present time to promote the application in the Colonial Empire of modern knowledge in regard to nutrition. In April last a circular despatch was sent by the Secretary of State for the Colonies to all British Colonial Dependencies, in which he invited particular attention to this problem. On the recommendation of

the Secretary of State for the Colonies, and after consultation with the other Ministers concerned, the Prime Minister has now appointed a Committee of the Economic Advisory Council which will review the replies received to this despatch and make recommendations as to the action to be taken upon them. The Committee will also advise generally how best to promote the discovery and application of knowledge in this field.

The terms of Reference of the Committee are as follows:—

1. To survey the present state of knowledge in regard to nutrition in the Colonial Empire in the light of the replies received to the circular despatch addressed by the Secretary of State for the Colonies on the 18th April, 1936, to the Officers Administering the Governments of Colonial Dependencies.
2. To advise from time to time as to the measures calculated to promote the discovery and application of knowledge in this field.

The Chairman of the Committee is the Parliamentary Under-Secretary of State for the Colonies, Earl De La Warr; the Secretaries are Mr. D. H. F. Rickett (Economic Advisory Council) and Mr. C. G. Eastwood (Colonial Office); and anthropological aspects are represented by Dr. Audrey Richards.

The Colonial Secretary's despatch gives concise and clear statement of the problems of nutrition in relation to public health and especially the bearing which it should have upon agricultural, veterinary, educational and general policy in the Colonial Empire. It is a subject in which technical knowledge has made great advances, and it is an act of wise statesmanship to bring that knowledge to bear upon the general welfare.

J. L. M.

CORRESPONDENCE.

More 'Kernos' Vessels from Tiflis. (Cf. MAN, 1937, 146, 30).

146 SIR.—In reference to your article, MAN 1937, 30, on *A modern 'Kernos' vessel from Tiflis*, the Museum für Völkerkunde in Hamburg has a vase like that figured there (Pl. B); there are three more in the Tiflis Museum. The Hamburg vase is figured (Pl. 24a) in Ernst Grohne *Die Koppel-, Ring- und Tullengefässe* (Abhandlungen und Vorträge v.d. Bremer Wiss. Gesellschaft, vi. 1-2, pp. 1-121: 47 plates: July 1932). Early in 1929 I obtained information from a Georgian acquaintance in Tiflis about the origin and significance of these vases, and learned that for fifty years they have been no longer in use, but formerly were used at weddings and other festivals. The name for them was not known; on the bottom of one of the vases in Tiflis the word *maram* is written in Georgian letters; but this word means a 'wine cup' (cf. Ill. *Völkerkunde II* 2, p. 684). Besides the *kernos* above-mentioned, our Museum has also a clay jug with a stag's head, from Tiflis. Jugs decorated with animal-figures—bear, horse and others—are still common in Macedonia.

A. BYHAN.

147 SIR.—On this subject, Dr. R. P. Blake, of Harvard University, sends me the following information:—

(1) *Survival of a ritual akin to the Artoklasia of the Greek Orthodox Church.*—The use of cakes, pastes, wafers, etc. in the Caucasian rituals is very widely spread, and is not infrequently associated with libations: see N. Djanashia *The Religious Beliefs of the Abkhazians* Khristianskii Vostok IV (1915) 72-112: N. Marr, *ibid.* 113-140 (both in Russian). In the *Totenmahl* of

Armenia, it is customary to sacrifice an animal; indeed the term *metigh* which in certain modern dialects means 'a gift,' has the older meanings: (1) 'agepe' in the Greek sense, (2) a 'sacrificial meal.' This custom does not seem to be so widely spread in Georgia so far as Dr. Blake's observations go. Djanashia (v. above) has nothing to connect libations with the cult of the dead. Nor has I. Djavakhsishvili *History of the Georgian People* (in Georgian) I. ch. 2, p. 74 ff. the best general account of Georgian mythological folklore. For libations, special jars are used, but not jars of special form.

(2) Dr. Blake does not know the word *maram*, and suggests that it may be Greek; but I do not know any such Greek word.

(3) For libations, special jars are used, but not jars of special form. Of these jars and their use, Djanashia (*l.c.* p. 90) gives the following account, translated by Dr. Blake.

Translation of passage from Djanashia's article, *The Religious Beliefs of the Abkhazians*.

"In honor of 'God' each Abkhazian has in his cellar "a special jar which is filled with the very best malt." (Cyclo is so defined, but here it appears from what follows to mean 'must' (cf. "glass of wine") rather than 'malt.') "However fearful the need may be which befalls his "house, the Abkhazian will not open for any consideration whatsoever the sacrificial jar until the rite of "prayer to God has been celebrated." This holds good says Djanashia's note, for other sacrificial jars as well. "Early in the morning, on the return from church, the "head of the family, surrounded by all the members of "the household, slaughters a kid over the sacrificial "jar and asks mighty God mercifully to accept the "humble sacrifice which they offer as their fathers and

"grandfathers have taught them." He humbly asks Him "not to punish them for their errors and transgressions." After this the flesh of the sacrificial kid is boiled, and sacrificial cakes of wheat flour are baked. All this is again brought into the cellar and placed before the sacrificial jar. The members of the family kneel and the head of the family piously cleans off and opens the jar, and holding in his left hand the heart and liver of the kid, which are spitted on a twig of *funduk* (a word "unknown to Dr. Blake") prays to *Antswa-du* ("mighty God") that He should grant to him and to his family a long and happy life. In this connexion the head of the family must mention that they are carrying out everything "as their fathers and grandfathers had taught them to do." Then he dips out a glass of wine and pours a libation with it on the heart and liver and on the sacrificial cakes, carries these three times over the heads of those kneeling in prayer, saying, "Give us the warmth of thine eyes and thy heart, free us from all complaints and illnesses." Again a libation of wine, then all arise, turn round three times from right to left and lay each a bit of incense on glowing coals. All stand quietly for a few moments until "mighty God" shall accept their sacrifice, and then in strict observance of the order of age, bits of the heart, liver and cakes are given to each and also a glass of wine to all present. It is to be noted that of this sacrifice only members of the household are permitted to eat and drink. Even the married daughters are considered to be strangers, and are not allowed to eat, but wives and children may. It is sinful even to think of selling this wine. In the majority of families women are not allowed to touch the sacrificial meats at all. In this manner each year the Abkhazians offer domestic sacrifice to God "for His share."

At intervals of from three to five years each Abkhazian must offer God "His share" (i.e., the sacrifice) in the forest, where a clean place is chosen under a tree, usually an oak or a hornbeam. Here is generally sacrificed a gelded goat as many years old as the interval since the previous prayer in the forest. To this ceremony no women whatsoever can be admitted. Their sole participation consists in preparing the sacrificial cakes. The ceremony is carried out by the oldest member of the family, to whom belongs the hide of the animal sacrificed. The sacrifice takes place before the *ashwamkyat*. The word *ashwamkyat* is explained (p. 81) as a temporary table made out of four sticks on which are laid twigs. These are then covered with green leaves, generally of the wild walnut, the oak and the hornbeam, which I have described above. "The ritual of the ceremony is the same as that in the house except for the absence of the wine jar. A little wine is brought for libation in a pitcher. All the males in the district assemble at this ceremony, at the end of which they sit down on the grass and green herbs are laid before them, on which a meal is served. There should be given to each one present a piece of the liver and the heart of the sacrificial animal. The sacrifice must be entirely devoured on the spot; not the smallest piece may be taken home. The horns of the sacrificed animal are hung high up above the *ashwamkyat* and remain there. Three legs of the *ashwamkyat* are cut off (each at a single blow p. 81); but the fourth remains; and everyone leaves."

Oxford.

JOHN L. MYRES.

Primitive Hunters of Australia. (Cf. MAN, 1937, 40).

148 SIR,—The review of my leaflet 'Primitive Hunters of Australia' by Mr. R. Piddington (MAN, 1937, 40) is open to protest. Admittedly the pamphlet is superficial and it is designed as a brief

explanation of the objects displayed. It is not true, however, that the leaflet contains no indication of the relative importance of various aspects of Australian culture. I stressed the value of magic and amply illustrated my points by reference to material in the cases. If important items are omitted from the bibliography, the fact is regrettable, but seven pages of useful references should be ample in a guide of this kind to introduce the beginner and the casual visitor to more extended reading. On page 55 is a list of periodicals which contain many articles to which space did not permit detailed reference. WILFRID D. HAMBLBY.

149

SIR,—Since Mr. Hambly is apparently in agreement with me regarding the superficiality of the work and the omission of important contributions from the bibliography, the main point at issue is whether I was correct in my assertion that the pamphlet contains no indication of the relative importance of various phases of native life. Mr. Hambly's reference to magic (which I did not mention) is unfortunate, since this comparatively unimportant aspect of Australian culture receives seven pages of the pamphlet, as against a single page devoted to the vitally important subject of initiation ceremonies; while the author writes (concerning Australian kinship systems): "A paragraph will suffice to show the complexity of the social structure." It is true that under magic are subsumed a set of heterogeneous facts, ranging from quartz crystals to warfare, the introduction of the latter giving an entirely erroneous impression of the importance of black magic as a cause of war. Thus, out of seventy battles recorded by Warner, only five were due to this cause. The important subject of tribal economics, again, is completely ignored. It was upon such considerations as these that my assertion was based. The criteria involved concern primarily the social anthropologist. But they are not altogether irrelevant to the question whether a work such as this is likely to lead the casual reader to a serious study of Australian culture along scientific lines. RALPH PIDDINGTON.

Fire-Walking. (Cf. MAN, 1936, 235.)

150

SIR,—Fire-walking has a perennial fascination because it seems to go against the laws of physics. That, however, is a subject for the physicist and for the physiologist. The business of the student of customs is to explain the behaviour, not the physical results. The behaviour includes the associated ideas, for thinking is merely internal behaviour. What the Fijians do and think in the matter of walking on fire is available to us in two articles in Fijian by Fijians in *Na Mata* (the official vernacular gazette), 1911, p. 108; 1914, p. 98. From these articles and information recorded verbatim from a native of Mbengga it is possible to supply portions of the pattern which are usually omitted.

A. An account of the rite is generally prefaced by a myth which tells how the god taught the first fire-walker (Cf. my *Life-Giving Myth*).

B. The fire-walkers are descendants of that first fire-walker. Others may only walk over if accompanied by one of the family.

C. The fire-walkers first hide in the jungle. This preliminary seclusion is typical of many initiations.

D. They dress up.

E. The oven burns four days. With few exceptions all Fijian rituals last four days.

F. During that time the performers may not paint their faces black, eat raw food, or fornicate, for that was forbidden by the god (Abstinence).

G. At the end of the four days a pudding is offered to the spirits in Namali and eaten. This corresponds to the usual 'bathing-feast' (*isilisili*) which winds up every Fijian ritual after four days.

My information does not claim to be complete. Further inquiries from the owners of the rite might yield further observances.

The Indian rite is preceded by a long course of temple worship with fasting. Thus has still to be described in detail before there can be any profit in discussing the custom.

A. M. HOCART.

A Polynesian Wall of Coral in the British Solomon Islands.

151 SIR.—During a visit to Sikaiana Atoll or Stewart Island in May, 1906, the late Mr. C. M. Woodford, C.M.G. (*Geographical Journal*, XLVIII, July, 1916) alluded to, but did not see, a stone fortification built under direction of a Samoan who arrived in Sikaiana about three hundred years ago.

The next reference appears to be that of Dr. S. M. Lambert (*Health Survey of the British Solomon Islands Protectorate*, Suva, Fiji, 1934) who mentions a stone wall, running along the centre of the [largest] island from south to north, of which remnants still remain.

During a very short visit to Sikaiana in March, 1936, the present writer was successful in getting some old men to take him to this wall which is in the midst of dense undergrowth. It was found to be made of blocks of reef coral (the only stone available in the whole atoll) and, in the only spot where time could be found to determine its course, ran from north north-east to south



FIG. 1. DETAIL OF CORAL WALL.

The *Topi* is 14 inches across the brim (long axis) and 7 inches in height.



FIG. 2. BLOCK OF CORAL IN FRONT OF MAN IN SECONDARY JUNGLE.

south-west. Several of the old men, apparently about 65 years old, said that it was exactly in the same state to-day as when they were children. The wall was made to serve as a boundary between the original settlers and those who came subsequently from a place called Luahatu which is probably in either Samoa or Tonga. The position of Sikaiana as shown in Admiralty Chart Number 214 is some 13 miles too far west.

R. J. A. W. LEVER.

A Figurine Vase from "Tiflis." (Cf. MAN, 1937, 31.)

152 SIR.—Those who regard a primitive or archaic technique as a criterion absolute of antiquity may be given pause for reflection by the figures on this modern vase. Had the neck of such a vase come to light without a pedigree and possibly unglazed, imagination boggles at the number of past millenia that would have been advanced by some as indicating the period of its manufacture.

D. H. GORDON, Major.

Cylindrical Beehives in Egypt and Cyprus. (Illustrated Cf. MAN, 1937, 33).

153 SIR.—In No. 33, 1937, Mr. W. H. Ingrams describes an interesting beehive from the Wadi Du'an. This has a close family resemblance to those used by the Greeks and Romans (see Daremberg and Saglio, *Dict. des Antiq. gr. et rom.*, article *Apes*) and to those still in use in the Near East, particularly in Egypt and Cyprus.

In Upper Egypt the hives consist commonly of sun-dried mud cylinders or pipes, about three feet and a half

long by about seven inches in diameter. These are laid horizontally in wall-shaped piles of six to eight rows high, with a total height of $4\frac{1}{2}$ to 5 feet. An interstitial filling of mud holds the pipes together. In the pile illustrated (Fig. 1), seen at Luxor, the wall of hives is 20 feet in length along the base and is made up of 153 separate cylinder hives. At each end the wall slopes inwards as each row is, theoretically, one cylinder less than the one next below. The hives are preferably stacked in the shade of a tree.

When a swarm is induced to take possession of a hive, the front end is plugged with a mass of clay wherein a small opening is left at the top for the bees to pass in and out. The hinder end is plugged with a handful of sacking or of rags, pulled out whenever the bee-keeper wishes to learn what work the bees have done; when doing this he waves a smoking stick at the opening to deter the bees from issuing forth to attack him. When honey has to be gathered the bees are first expelled



FIG. 1. CYLINDRICAL BEEHIVES, LUXOR, UPPER EGYPT.

by the smoke of dried dung burned at one end of the cylinder. The attendants wear a cylindrical gauze veil, pendent from a wire hoop, to cover and protect the head; the lower margin rest upon the shoulders.

The clay cylinders are moulded upon a wooden roller. From the longitudinal markings on the exterior of the cylinders, it would appear that a 'tattie' mat, made of narrow, palm-leaf midrib-splints, is used to enwrap the mud coating on the roller whilst drying.

In Cyprus the same principle is followed as in Egypt in the construction of the hives but here the cylinders are usually of earthenware set in a heavy matrix of clay. The whole pile, about 7 feet high, is roofed like a rough farm shed, complete with beams, rafters and grassy sods, in order to protect the hives from rain (Fig. 2). In those figured, seen near Kyrenia, the individual hive-pipes are not visible owing to the amount of clay used to bed them in. But the position of each is indicated by a small opening, roughly triangular, and by the lip beneath, made of a piece of broken tile, placed there to serve as an alighting shelf for the bees. A masonry wall at each end and at mid-length gives support to the pile.

Each hive cylinder when of earthenware is about two feet and a half long with a diameter of nine inches. In other instances they are made as in Egypt of mud or clay mixed with chipped straw and of shorter length, being usually 18 to 20 inches long with a diameter of 10 to 12 inches. These are esteemed as cooler in



FIG. 2. PIPE BEEHIVES, KYRENIA, CYPRUS.

summer and warmer in winter and produce stronger colonies than those reared in earthenware pipes.

It would be useful for comparison if Mr. Ingrams would supply further details of the hives used in Wadi Du'an—their dimensions, material, number and arrangement. The queen bee's cage also calls for description.

JAMES HORNEILL.

Bee-Keeping in the Wadi Du'an: A Correction.

(*Cf. MAN, 1937, 33.*)

154

In *MAN, 1937, 33*, the figures are inaccurately described. In fig. 1, the left-hand side of the photograph should be at the top; the tunnel-shaped bee-hive is lying along a wooden support, and the other rounded thick pole is to the right of it.

In fig. 2, the photograph represents, not "a mat" but the "queen-bee's cage" mentioned in l. 5 of the closing paragraph: this is no part of the "swarming apparatus."

D. INGRAMS.

The Editor regrets these mistakes, and repeats fig. 1 in its correct position.



BLOCK FROM *MAN, 1937, 33.* FIG. 1.



FIG. 1. A COMPOSITE 'TAMBUA' FROM FIJI. *Drawn by Miss Vera McHugh* FIGS. 2 AND 3. BOTH SIDES OF THE SAME 'TAMBUA' SHOWING ITS COMPOSITE CONSTRUCTION. FIG. 4. RADIOGRAPH OF THE COMPOSITE 'TAMBUA'.

A COMPOSITE 'TAMBUA' FROM FIJI.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 155-173

AUGUST, 1937

ORIGINAL ARTICLES.

Fiji.

With Plate H.

Roth.

A COMPOSITE 'TAMBUA' FROM FIJI. *By Kingsley Roth.*

155

Definition.—The Fijian word *tambua* is used to translate the English 'whale's tooth.' These whales' teeth were obtained from the cachelot whale, and in order to acquire value as *tambua*—the most precious possession of the Fijians—they were polished and oiled, had two holes bored one at either extremity, and a cord attached, usually of plaited coconut fibre, for convenience in handling.

Use.—The following are some of the very many instances when *tambua* are presented according to native custom :—to a chief as a sign of respect and loyalty: as property on ceremonial occasions such as weddings and funerals or at any gathering attended by persons of chiefly rank: as an offering accompanying some request, *e.g.*, to a chief for permission to use a piece of land, or for assistance in the execution of some affair which could otherwise be accomplished only with difficulty or perhaps not at all. One *tambua* suffices for any of these purposes, but one frequently sees presentations of a bunch of them.

History.—The occasion on which the subject of this article (Pl. H, Fig. 1) was presented I have so far been unable to ascertain beyond that it was taken from its repository in a temple (*mbure kalou*) in a village of Naitasiri province on Viti Levu island by the chief of Naitasiri, by name Ratu Peni Tanoa, who presented it to Sir John Bates Thurston, a former Governor of the Colony. Ratu Peni was a descendant of Ratu Thakombau, who was *primus inter pares* when the chiefs of Fiji ceded their islands to the British Crown in 1874. Tradition adds that it was the work of Tongan carpenters, but I take no responsibility for the authenticity of this statement. After extensive inquiry in Fiji I conclude that it is in all probability a unique specimen. All the Fijians to whom I have shown it remark on its beauty and on the workmanship.

Description.—This composite *tambua* is made up of two complete whales' teeth and sections of several others, all being pieced together so as to form a symmetrical whole which in outline resembles a single *tambua*. The total number of pieces including the two whole whales' teeth is nine. The whole of one whale's tooth and the point of the other can be seen when the *tambua* is looked at from either side (Figs. 2 and 3). The method of manufacture must be left to supposition, for without taking the thing to pieces it is impossible to state this with accuracy. There are four holes visible at the surface of certain of the sections or pieces of whale's tooth. As far as one can tell, these holes, as well as those to which the cord is secured, taper from the surface inwards. The ends of very finely plaited coconut fibre cord can be seen at some of these holes, and this cord is, I think, the only binding material used in joining the pieces together. No metal has been used. This fact has been proved by having the *tambua* X-rayed (Fig 4). The density, contrast, and definition of the X-ray print leave much to be desired, but the figures given below indicate the difficulty experienced in endeavouring to find out by X-ray technique the nature of the binding used in the *tambua* :—penetration: 95 kilovolts; current: 100 milliamps; distance: 25 inches; time: 5 seconds. A Potter-Buckey diaphragm was used. By employing this high power the

lesser densities of the object were penetrated to such an extent as to render them invisible in the resulting film and what appear to be cavities or holes are thin portions of the main bone and on the under or inner surfaces. The *tambua* weighs 4 lbs. without the cord, and its length across direct from tip to tip is 11 inches.

Acknowledgment.—The *tambua* was the property of Miss Alys Thurston, daughter of Sir John, and to her I express my appreciation for permission

to examine and photograph it. I am indebted also to the Medical Superintendent of the Colonial War Memorial Hospital, Fiji, for the X-ray film (Fig. 4), and to Miss Viwa McHugh for the beautiful drawing (Fig. 1), which has brought out details difficult to reproduce faithfully in a photograph.

Miss Thurston has presented the *tambua* to the Cambridge University Museum of Archaeology and of Ethnology.

Assam.

Mills.

THE CUSTOM OF TEMPORARY MARRIAGE AMONG THE EASTERN ANGAMI NAGAS OF ASSAM.

By J. P. Mills.

156 Anyone acquainted with the Eastern Angamis must be struck by the curious fact that almost every girl leaves her first husband after a married life which has lasted for a period of from a few days to a year, two or three months being the usual time the couple spend together. Less than one per cent. remain permanently and without a break with their first husbands. If asked the reason for the parting the girl will give some trivial excuse, such as that her mother was very busy and she returned home to help her.

The real reason is the strong prejudice felt against an adult of either sex dying without sexual experience. This sexual experience is advertised by a change in dress. A young Eastern Angami man may not wear the distinctive lines of cowries on his kilt till he has had connexion with a woman. Being a man he need not wait till marriage for this: he will either have an intrigue with a girl, or, if he wishes to avoid embarrassing questions, he will visit a village prostitute, to whom he pays a specially large fee. Village prostitution is unknown in any other tribe, but seems to be an old and indigenous institution among the Eastern Angamis. He can then wear a kilt ornamented with lines of cowries, which he himself sews on. This clear connexion of cowries with sex is interesting, and is emphasized by the fact that a man particularly expert in amorous intrigue may wear a fourth line in addition to the customary three (*cf.* Hutton. *Angami Nagas*, p. 25).

With a girl it is different. She may have had intrigues, but until marriage she is officially a virgin, and open laxity on her part would meet with strong disapproval. It is therefore absolutely essential that every girl should be married, at least temporarily, in her late teens. Till she has been, she shaves her head, and wears long ear

ornaments, called *nyethü*. Even the halt, the lame and the imbecile are provided with temporary mates of sorts, for it would be shameful even for them to go through life with shaven heads.

Though everyone knows that the marriage will not be permanent it takes place with full ceremonial. A young girl of the bridegroom's clan accompanies the bride to her husband, and sleeps with her for the first two nights. On the morning of the first day she cuts off the bride's *nyethü*, as a sign that she is a married woman, even though the marriage cannot be consummated for four nights. On the first day, too, other girls of the bridegroom's clan visit the couple, are entertained, and utter formal wishes for a fertile and prosperous union as they go. On the second day after the marriage the wife eats a little raw rice from the husband's rice bins, to show that she has joint charge of the family food supply. On the third day the couple visit the girl's parents with a gift of food and drink. The ceremonies over, the couple may part as soon as they feel mutually inclined, the girl going to her parents' house, for she may no longer sleep in the unmarried girls' house. So customary has this parting become that quite frequently a couple who are really fond of one another will part for a time, the girl saying she 'wishes to rest in her parents' house,' and will later reunite and live happily together for years. More usually however each unhurriedly seeks another partner. However brief their time together has been the girl must weave and give to the man a body-cloth *pi tho kwü* ('head making-right cloth') and a kilt called *pi tho nye* ('head making-right kilt'). These are regarded as the price paid to him for giving her the right to grow her hair long.

The second marriage, permanent though it is

meant to be, is shorn of all but the most meagre ceremonial. The woman eats no rice for one day, consummation is forbidden for one night, and both visit the girl's parents. It is by no means necessary that the girl's first marriage should be with a man previously unmarried, nor that her second should be with someone who has already gone through a first marriage. She may marry as her second and permanent husband a man who has never been married before, but more usually it is the second marriage of both parties. It may or may not last. But it is entered into deliberately and only serious differences would be allowed to break it up.

A final word is necessary on the striking contrast provided by the Western Angamis, closely allied though they are to the Eastern in race and custom. Among them, as among the Eastern, a girl may not grow her hair till marriage, but the great majority of first marriages are deliberately arranged and are lasting. Divorce is greatly disliked. Something has to be done for the cripples and mentally deficient, but only the humblest of the humble will consent to give them formally the married status. Among decent folk for a young man and a girl to marry merely so that she can let her hair grow would be considered disgraceful.

SOME OBSERVATIONS CONCERNING THE STATURE OF FRESHMEN ENTERING THE UNIVERSITY OF TORONTO, CANADA. *By John Allan.*

157 Through the kindness of Dr. G. D. Porter, M.D., Director of Health Services at the University of Toronto, I have been allowed access to the records of all entrants to the University. Unfortunately circumstances prevented me from investigating the entire series of measurements collected during the past sixteen years by Dr. Porter and his colleagues. In order to obtain some indication of developmental trends during the past decade I confined my attention to the records for 1926, 1933, 1934, 1935 and 1936. The great majority of the entrants were between 17 and 20 years of age, so I restricted my investigation to those four age-groups.

Height.—It is interesting to find that between 1926 and 1933 there was quite a marked increase in average height in each age group, and also that even since 1933 there has been some further increase. Table 1 gives the figures for the five

years and the results for the three years 1926, 1933 and 1936 are shown diagrammatically in Figure I.

During the ten-year period commencing 1926 the University fees have been raised on at least two occasions and the standard of the entrance examination for Arts Students was also raised. It is impossible to estimate what effect, if any, such changes are likely to have had on the average stature. Most probably they are responsible for the slightly higher percentages now entering the University at the ages of nineteen and twenty; see Table 5. Those changes might also have been held to account for the increase in the average height obtained (Table 4), when all age-groups are taken together, had it not been made clear, by taking the age groups separately, that the increase was apparent in

FIGURE I.—AVERAGE HEIGHT OF FRESHMEN (UNIVERSITY OF TORONTO).

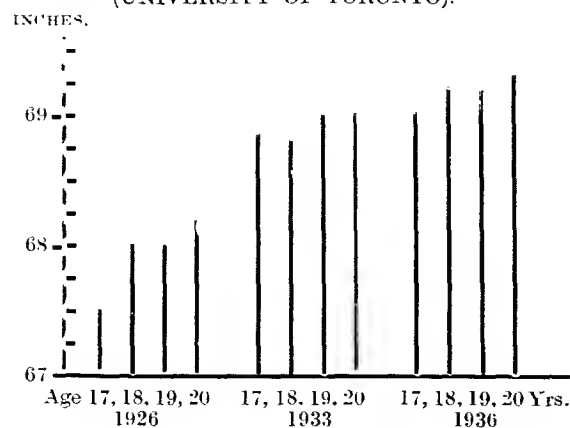


FIGURE II.—INCIDENCE OF TALL AND SHORT FRESHMEN IN AGE-GROUP 17-20 YEARS (INCLUSIVE).

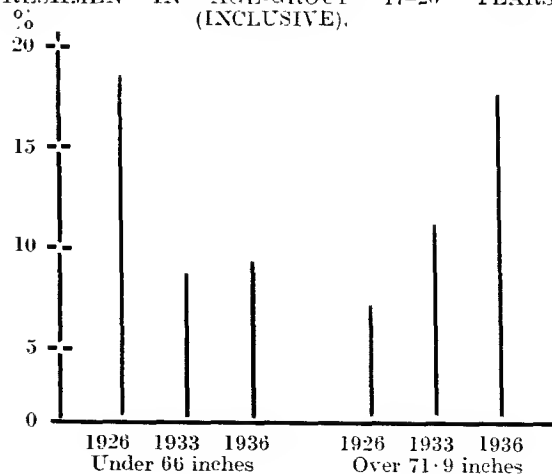


TABLE 1.—AVERAGE HEIGHT OF FRESHMEN ENTERING THE UNIVERSITY OF TORONTO.

Year.	Age to nearest Year.				Total Number.	% of all Entrants.
	17 years.	18 years.	19 years.	20 years.		
	Inches. Number	Inches. Number	Inches. Number	Inches. Number		
1926	67.5 (99)	68 (234)	68 (182)	68.2 (104)	619	77
1933	68.9 (132)	68.8 (285)	69 (182)	69 (102)	701	84
1934	68.5 (107)	69 (239)	69.1 (233)	68.5 (127)	706	86
1935	69.2 (100)	69.3 (257)	69.2 (218)	68.4 (118)	693	82
1936	69.1 (93)	69.3 (243)	69.2 (253)	69.3 (125)	714	88

Note :—1. In 1931 standard of Entrance for Arts Course was raised.

2. In 1933 the Fees for Arts Course were 25% above 1926 level (1926 Fees 100 dol.)

3. In 1936 the Fees for Arts Course were 50% above 1926 level.

4. Before 1931 larger numbers of students obtained employment in the vacations.

TABLE 2.—AVERAGE WEIGHT OF FRESHMEN ENTERING THE UNIVERSITY OF TORONTO.

Year.	Age.				Total Number.	% of all Freshmen.
	17 years.	18 years.	19 years.	20 years.		
	lbs. Number	lbs. Number	lbs. Number	lbs. Number		
1926	133.3 (99)	137.5 (234)	139.9 (182)	142.2 (104)	619	77
1933	138 (132)	142 (285)	142.6 (182)	143 (102)	701	84
1934	138.6 (107)	142.4 (239)	143 (233)	141.8 (127)	706	86
1935	140.8 (100)	141.9 (257)	144.6 (218)	142.6 (118)	693	82
1936	139.5 (93)	143.2 (243)	143 (253)	146.4 (125)	714	88

TABLE 3.—INCIDENCE OF TALL AND SHORT FRESHMEN. (IN AGE GROUP 17-20 YEARS.)

Height	1926	1933	1934	1935	1936
	%	%	%	%	%
72 inches and over	6.8	10.8	9.8	14.5	17.5
Under 66 inches	18.8	8.8	9.0	9.8	9.7

TABLE 4.—AVERAGE HEIGHT FOR ALL FRESHMEN IN 17-20 AGE-GROUP.

Year	1926	1933	1934	1935	1936
Height in inches	67.9	68.9	68.8	69.1	69.25

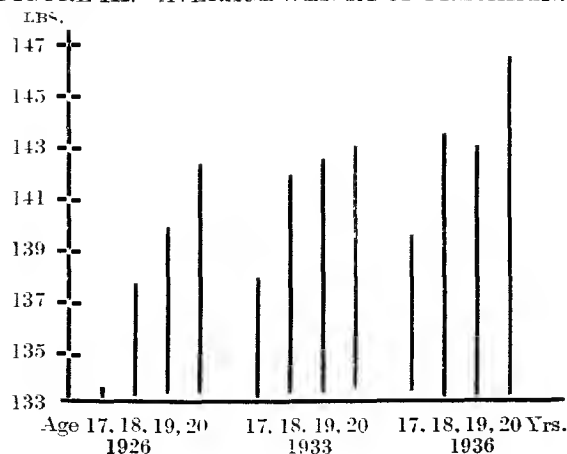
TABLE 5.—AGE DISTRIBUTION OF FRESHMEN.

Year	17 years	18 years	19 years	20 years	Total
1926	⁰ / ₁₂	⁰ / ₂₉	⁰ / ₂₃	⁰ / ₁₃	⁰ / ₇₇
1933	16	34	22	12	84
1934	13	29	29	15	86
1935	13	30	25	14	82
1936	12	29	31	16	88

all of them. The increasing numbers of tall students is clearly demonstrated in Table 3 and illustrated in Figure II. A peculiar feature of Table 3 is that there has been no reduction in the proportion of very short freshmen during the last four years. It is not impossible that conditions during the years of acute depression may be responsible, and if this supposition is correct the percentage in the category 'under 66 inch' may well increase during the next four years.

Weight.—The increase in average weight is shown in Table 2 and Figure III. If anything, it

FIGURE III.—AVERAGE WEIGHT OF FRESHMEN.



is rather more than proportional to the increase in height, the weight-height ratio having increased somewhat, in spite of the depression.

Conclusions.—The general upward trend of height and weight standards is still observable after the depression years. Whether this is in part due to the periodic raising of the fees (*see* note to Table 1) is problematical. It is perhaps worth mentioning that the average measurements for students taking Medical and Science courses are no higher than for those taking Arts, although the two former have to pay considerably higher fees. This seems to lend support to the theory that the increased standards for height and weight obtaining in recent years are due in part to improved knowledge of dietetic principles, and their application in practice.

The influence of alterations in the proportion of racial types attending the university is a matter that cannot be determined without further investigation. In recent years immigration from Central and Southern Europe and from the Orient has been considerably reduced, but I am inclined to believe that this has not had any significant influence on the composition of the student body at this University.

In passing I would like to point out that the average height of English Public School boys of eighteen is almost exactly the same as that for

freshmen of the same age in Toronto. In this connexion it should be remembered that those entering the University in Canada in general come from less wealthy homes than do the English group referred to. It would be interesting to discover why it is that the North American Continent, and in particular its Western border, provides better conditions for growth than are to

be found elsewhere. It is possible that climatic factors account in some way both for the stimulus to growth and for the relatively high incidence of infantile paralysis. If present tendencies are maintained, is it unreasonable to suggest that the optimum size for health, efficiency and intellectual development may some day be exceeded?

A NOTE ON THE ANGONI PARAMOUNTCY.
of Native Education. Northern Rhodesia.

158 The rival claims of Mpezeni and Umbelwa to the paramountcy of the Angoni have never been decided to the satisfaction of those who are most deeply interested in the matter—the Angoni themselves. Thanks to the work of Dr. Elmslie,¹ Dr Fraser² and the Rev. T. Cullen-Young,³ the history of Umbelwa's section of this tribe, and, with it, his claims to the chieftainship, are pretty well known and even Mr. Lane Poole⁴ has been content to follow them in his account of the tribe. The credit for unravelling Mpezeni's claim belongs to Mr. D. G. Lancaster, whose paper (in the press) on chronology and genealogy I have been privileged to see in manuscript. The story is told, from Umbelwa's point of view, simply and sufficiently in *Midauko*, a vernacular book published by the Livingstonia Mission (1933, pp. 135-136): and from Mpezeni's viewpoint in Maikol Jere's unpublished account, for which I am indebted to Mr. L. B. van der Walt, of the Dutch Reformed Church Mission, Tamanda, at which station Maikol Jere is an evangelist.

The chief wife (*gogo*) of Zwangendaba was Loziwawa Nqumayo, who was a sister of Zwide. She was barren and the chief, following a well-known custom, took her sister Sosera to raise children for the house. Such a wife is known as an *nhlanzi*. Mpezeni Ntutu was the son of Sosera.

Zwangendaba's second wife (*Lusungulu*) was Lomagazi Jere, in whose house there was also an *nhlanzi*. The latter bore Mtwalu. Later, Lomagazi herself bore a son, Umbelwa. These are the three men concerned in the paramountcy dispute.

Before the birth of Mpezeni, the people of Loziwawa's village, Emvuviyeni, brewed some

By J. M. Winterbottom, B.Sc., Ph.D., Department

beer and sent a pot of it to the chief. Zwangendaba, however, found extraneous matter in the beer—a hair in the Livingstonia account,⁵ 'something unmentionable' according to Maikol Jere. Highly incensed, Zwangendaba sent people to wipe out the village. The *ndunas*, however, finding Sosera pregnant, hid her and, later, her son, the future Mpezeni. On the presentation of this child to the chief, he was appeased.

The crux of the matter, however, lies in Zwangendaba's actions after the slaying. According to the Umbelwa version, the chief was not sufficiently softened to restore the child to his rightful position as heir apparent. In the Mpezeni version, Ntutu was not presented to his father for some years and did not lose his rights. Naturally, during the interim, the heir-apparentcy would pass to the house of the *lusungulu*, that of the *gogo* being supposed extinct. The hair, according to 'Midauko,' was taken by Zwangendaba to be an attempt to bewitch him: but 'something unmentionable,' while it might be supposed to rouse the chief to a fit of fury at the disrespect and carelessness it presupposed, would not cause the deep and lasting resentment that an attempt at witchcraft would bring about. It is probably impossible now to get the truth, but it might be worth while showing how subsequent events are to be reconciled with the two accounts.

If we assume the truth of Umbelwa's contentions, we can readily believe that Mpezeni would not be willing to resign his claims after his father's death and the quarrel between Zwangendaba's brother, Ntabene, and Lomagazi (a quarrel also due to a charge, made by the latter against the former, of trying to bewitch the chief), would give him a powerful supporter amongst the *ndunas*.

If, on the other hand, we take Mpezeni's

¹ W. A. Elmslie, *Among the Wild Angoni*, 1899.

² D. Fraser, *Winning a Primitive People*, 1922.

³ T. Cullen-Young, *Notes of the History of the Tumbuka-Kamanga People*, 1933.

⁴ E. H. Lane Poole, *Notes on the History of the Tribes of the East Luangwa Province of Northern Rhodesia*, 1934.

⁵ This implied an attempt to bewitch him.

account to be true, the claims of Umbelwa remain understandable. Those who, during the interval when Ntutu's existence was hidden, had paid court to the house of the *lusungulu*, would naturally be reluctant to change over to support a newcomer. Many of those implicated in the destruction of Emvuviyeni, too, would be apprehensive that, if Mpezeni assumed the paramountcy, he would take his revenge upon them: and according to Maikol Jere's account, he was himself indiscreet enough to hint as much to Mgayi⁶ before he was fairly in the saddle.

There remains only to weigh the probabilities. There are two or three rather suspicious points in the Umbelwa version, notably the account of how, in a time of hunger after the departure of Ntabene and the death of Mgayi, Mpezeni was asked to lead the whole tribe to a new country. The right of Zwangendaba to nominate his heir, and to pass over the *gogo's* house on an unproved charge of witchcraft, may also be queried.

The weakness of Mpezeni's story is the extraordinary fury aroused in Zwangendaba by an apparently trivial event. I confess, however, that it seems to me that the balance of probability is in his favour.

As between Mtwalu and Umbelwa, Cullen-Young states that the former's onset of puberty was delayed, whereas Umbelwa came of age at a lucky time. The most usual version current among the Natives is that Mtwalu, as son of the *nhlanzi*, voluntarily gave way to the son of the *lusungulu* herself.

There can be no doubt that Mpezeni lacked his father's genius for leadership; his failure to seize the opportunity to rally the whole tribe

⁶ My own informants say Ntabene, but Mgayi would account more plausibly for the effects.

behind him, a failure to which reference has already been made, is one example, and the defection of his *nduna* Chiwele, who first refused to accompany him to Mpinduka and then to rejoin him when he moved to Chiposa, is another.⁷ But Mpezeni's defects as a leader are far less marked than those of Umbelwa. The latter started his career with a severe defeat at the hands of his father's *nduna* Zulu Gama, allied with Mgabi; then followed the revolt of the Atonga, who defeated the punitive expedition sent against them and made good their independence. The revolts of the Ahenga and Batumbuka, though avenged, still further reduced the number of Umbelwa's subjects and there was also an humiliating defeat at the hands of Mwase Kasungu. A long series of bickerings between Umbelwa and one of his war leaders, Pikamalaza, resulted in the latter and his superior, Magodi Ndhlovu, crossing the watershed into what is now Northern Rhodesia in order to put themselves beyond Umbelwa's jurisdiction. Mphamba, a minor Tumbuka chief, took himself off and settled in the country of the Chewa Zumwanda, himself a chief of no great importance, without, apparently, Umbelwa being able to do anything about it.⁸ The 'drift from Umbelwa' is still going on to-day and it may be doubted if this chief would still be a figure of great importance, had he not been supported by the European Administration on account of his historical position.

⁷ Mpezeni did send a punitive expedition, but it lost its way, and was annihilated by Gomane.

⁸ I am indebted to Mr. F. B. Macrae, District Commissioner, Lundazi, for this piece of information, which he obtained from the District Note-book and subsequently checked.

EASTERN HIMALAYAN BLOOD-GROUPS. By Eileen W. Erlanson Macfarlane. Illustrated.

159 The unusually high percentage of Group AB among Tibetans at Gyantse which was found by Captain D. Tennant, I.M.S. (Gates, 1936B) makes it highly desirable that more data be obtained from that interesting race.

While on a visit to Kalimpong, North Bengal, in March, 1937, I was able to test a small sample of Tibetans, or Bhutias, as they call themselves. Kalimpong is the terminus of the main trade route between Tibet and India and throughout the dry season Tibetan merchants and muleteers

arrive there every day with ponies and mule trains bringing wool. A few Tibetan families have settled in the Tibetan bazaar in Kalimpong and Darjeeling and there are always a number of professional wandering beggars from Tibet in the district. These people are not easy to approach and some have superstitious objection to losing a drop of blood. With the co-operation of the Scottish Mission doctors and teachers I obtained blood from a few Tibetan patients at the hospital and dispensary, as well as from some students who attend the mission schools

(fig. 1). With the help of the Raja Tobgye Dorji I was able to test a dozen of the staff at the Bhutan Durbar House. These Bhutanese were nearly all from Ha. Bhutan. and they belong to the



FIG. 1. THREE BROTHERS, FROM YATUNG, TIBET.
TASHI, 18 YEARS; MINGMA, 13; TSEWAND.
ALL BELONG TO GROUP A.

Tibetan race also. There are Bhutias in Sikkim State too (fig. 2) who resemble the Tibetans physically and wear similar dress and ornaments. Twenty of the subjects tested were natives of Eastern Tibet, from Chumbi, Kham and Yatung. Twelve were natives of Bhutan, thirteen lived in the Districts of Darjeeling and Kalimpong, Bengal, five were from Gyantse, Tibet (2 Group A, 3 Group O), five from Sikkim State and one from Lhasa.

The sample of fifty-six therefore, though small, is free from any possible effects of inbreeding which may exist in circumscribed localities. Adults and a few children were tested, including fourteen females. The proportions of the blood-groups differ considerably from the results of Tennant (Table I) but agree in showing that the Bhutia race is "well saturated with the blood "groups" (Gates). The percentage of Group B is of the same order as that found by Tennant and considerably lower than in the neighbouring Nepalis. The percentage of O is much higher and that of A lower than at Gyantse. The Gyantse conditions may be partly the result of inbreeding, Group A having spread to the exclusion

of Group O as among the White Jews of Cochin and Paniyans of Wynaad (Macfarlane). Gates' suggestion that the high frequency of Group AB in Gyantse may be due to admixture with Chinese is highly feasible because a Chinese garrison was actually stationed in Central Tibet at the beginning of this century until 1912 (Macdonald), and Tibetan social codes permit polyandry and temporary unions.

The proportions found by me indicate that either blood group relationships differ markedly in different parts of Tibet, or that conditions in Gyantse are exceptional for reasons already suggested. My figures indicate that an eighth of the Bhutias belong to Group B, over one-third to Group A, and almost half of them all to Group O. Group AB is rare in this mixed sample. The physical resemblance of the Tibetans to American Indians, particularly the Navajos, is striking to anyone familiar with both peoples. Some of the Tibetan designs on cloth, as well as their silver and turquoise jewellery also remind one of the Navajos. The nearest Mongoloid neighbours of Tibet in China and Nepal are fairly high in B and it is remarkable that the Tibetans



FIG. 2. ADAM, 45. FROM GANGTOK, SIKKIM.

have absorbed relatively little of this group. They have evidently been isolated from the main stream of Mongoloid migration since very early times. A large group of English in Liverpool

tested by Jones and Glynn (Weiner), folk who have probably obtained Group B only since the Middle Ages with oriental trade (Howells), showed 17 per cent. of Group B.

The blood-groups of seventy-eight Nepalis, all cultivators, belonging to twenty different castes, and residents of Kalimpong District, were also tested. These sturdy, industrious Mongoloid people are the cultivators throughout this part of the Himalayas and have gradually ousted the original inhabitants—the Lepchas, by their greater perseverance and thrift. The independent mountain state of Nepal is only a few miles west of Kalimpong and Darjeeling. Fifty of the seventy-eight belonged to six Nepali castes as follows:—Chetri (14), Gurung (6), Kumai (5), Rai (12), Tamang (8) and Subba (5). The rest are in fourteen other castes. Since the members of these castes intermarry all the data have been lumped together and they are believed to give a correct picture of the blood-group relationships in the Nepalis cultivator community. The Nepalis in the hills do not inter-marry with plainsmen. The proportions of blood-group frequencies show a greater similarity with those of the Chinese than with the nearer Tibetans, although Group A is apparently higher. Group A is fairly high in all these Himalayan peoples as

(figs. 3 and 4). Lepchas are usually small and slender and are the fairest people in the region. They often possess a clear yellowish skin and rosy cheeks. This small sample is sufficient



FIG. 4. PROFILES OF INDIVIDUALS IN FIG. 3.

to show that all three blood groups O, A and B are represented about equally in the Lepchas and that the proportions are apparently similar to those in the Nepalis. Nepalis and Lepchas occasionally intermarry in this region and date from isolated Lepcha colonies further in the mountains may be somewhat different.



FIG. 3. NEMA, 12 YEARS, LEPCHA (LEFT); RATANMAYA, 12 YEARS, NEPALI OF RAI CASTE (RIGHT).

in many other communities that have been isolated geographically for a long time (Gates, 1936A).

Blood was obtained from only twenty-five of the old inhabitants of the region, that interesting people the Lepchas, who are also Mongoloid

TABLE I.
Himalayan Blood Groups.

Race and No of subjects.	Numbers and percentages in Groups.			
	O	A	B	AB
Tibetans	36	26	20	7
(Macfarlane)	(46.5%)	(35.7%)	(12.5%)	(5.3%)
(Tennant)	187	(14.9%)	(47.1%)	(13.9%)
Nepalis	78	26	27	18
	(33.3%)	(34.6%)	(23.1%)	(9%)
Lepchas	25	6	9	8
	(24%)	(36%)	(32%)	(8%)

REFERENCES.

- 1 Gates, R. R.: 1936A. *Recent Progress in Blood Group Investigations*. Genetics 15: 47-65.
- 2 1936B. *Tibetan Blood Groups*. MAN 147.
- 3 Howells, W. W.: 1933. *Anthrometry and blood types in Fiji and the Solomon Islands*. Anthropol. Papers, Amer. Mus. Nat. Hist. 33: 283-339.
- 4 Macfarlane, E. J. W.: 1936. *Preliminary note on the Blood Groups of some Cochin Castes and Tribes*. Current Science 4: 653-654.
- 5 Macdonald, D.: 1929. *Twenty Years in Tibet*.
- 6 Weiner, A. S.: 1935. *Blood Groups and Blood Transfusions*. New York.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

West African Music. *Summary of a Communication presented by Laura C. Boulton, 8 June, 1937.*

160

Of all forms of expression in the life of an African native, music is by far the most vital. From the cradle to the grave it is so interwoven with his work, his play, and his social and religious life that we can make only an artificial separation in order to regard his music as an artistic expression apart from its role in the life of the people.

The African negroes, perhaps more than any other people in the world, have filled their lives with song. Beginning with birth and ending with death, there is a song for every activity, for every occasion, and whether he is sharpening his knife or paddling his canoe, or making a sacrifice to his gods, he does it to the rhythm of his song. Consequently there is a large repertoire of songs, lullabies, war songs, work songs, rollicking, boisterous songs and noble dignified laments. The texts of these songs make up the poetry of the people, and they show the same feeling for balance, form, symmetry and rhythm revealed in all the artistic expressions of the Africans—in the dance and sculpture as well as in the music.

There is, of course, no notation, and much of the music has been handed down through many generations by word of mouth from father to son, from mother to daughter. In this way the tribes have passed on in artistic form their sentiments, emotions, inspirations and traditions. The history, customs and intimate life of the people are reflected most directly in the songs but also in the ceremonial rites and in the musical instruments.

The voice is the instrument which plays the largest part in the music of any primitive people, and this is true in Africa. Peoples are distinguished more by the manner in which they sing than by what they sing. Certain groups develop definite singing techniques, and one can often recognize the songs of special tribes, for example, the Tuaregs of Timbuktu, by the singing technique more quickly than by the melodic or rhythmic structure.

The musical instruments of Africa are very important from the point of view of cultural research. They can be seen, handled and measured and are thus of great value in the material culture. They have an important function in the spiritual and mental life of the people through their ritual and secular uses. They furnish excellent material for research in the history of African civilization and shed considerable light on the origins of certain cultural phenomena. Through a study of their craftsmanship, development, and distribution and of the general musical achievement of the people and the cultural significance of their tribal music,

much valuable information is added to our anthropological knowledge.

Studies in primitive music have been in progress for years, but the opportunities for this work were very limited and the technical difficulties were great. With the advent of adequate recording equipment this study has now become an accurate science.

The musical recordings (which with the aid of lantern slides in colour demonstrated the great variety of forms of West African music), were made in Senegal, the French Sudan, Nigeria and the British Cameroons, on Mrs. Boulton's fourth African Expedition. The most ancient of instruments with highly significant ritual uses, for example, the sacred drums of Southern Nigeria, as well as more recently developed purely secular instruments, such as some of the stringed instruments of the Sudan, were heard in the records.

The wind instruments included melodious flutes from Timbuktu and signalling horns from Mt. Cameroon. There are, however, fewer wind instruments in Africa than stringed instruments. The various stringed instruments demonstrated ranged from a very primitive fiddle to an elaborate harp-lute with twenty-one strings. One of the oldest and most interesting instruments recorded was the musical bow (developed from the archer's bow) in which the single overtones are amplified by the cavities of the head with resulting tones which are strangely beautiful. Thanks to the Carnegie Corporation who has financed this research, specially built electric equipment made possible the recording of the fragile tone of this instrument.

Of the percussion instruments the xylophone orchestras produce the most melodious records. The drums, however, are the most interesting instruments in Africa and the most universal. Their variety of shapes and sizes, their many uses ritual and secular, the taboos connected with their manufacture and playing (both hereditary professions in many tribes) make them an important study in connection with the tribal activities all over the African continent. The records demonstrated the drum language and also the rhythmic complexities of the drum orchestras which build up symphonies of rhythm beyond anything ever conceived in western music.

The African native with his prodigious rhythmic sense has developed the field of rhythm to such a degree in his music that it makes us feel a distinct lack in our own music. It is probably in this interesting field that African music has the most to contribute to western music. It may be that just as certain forms of our present music evolved from the court dance, our future music may have the negro dance for an ancestor.

PROCEEDINGS OF SOCIETIES.

Congrès International de Folklore. *Paris: 23-28 August, 1937.*

161

This Congress celebrates the creation of the French 'Département de Folklore,' and is

held in connexion with the Exposition Internationale de Paris under the patronage of MM. Georges Huisman, Director-General of the Fine Arts, Edmond Labbé, Commissary-General of the

Exhibition, and Hippolyte Lac, Director-General of Technical Education; and the President is Dr. Paul Rivet, Professor at the Museum of Natural History and Director of the 'Musée de l'Homme' which replaces the well-known Ethnological Museum of the Trocadéro. This Congress meets to discuss a sequence of connected topics (thèmes) presented by leading French specialists, with the object of promoting the present needs of Folklore students by illustrating the organization of research in particular subjects, such as (1) rural life with its habitations and fundamental industries; (2) widowhood and re-marriage, with their social and legal implications; (3) popular literary forms in their relations with traditional history and religion; (4) international co-operation in bibliography, cartography, and phonography (*enregistrements sonores*). There are also sections for Folklore applied in various ways to national and social life.

Those who wish to take part in these discussions should give notice to the Secretary of the International Congress of Folklore, Dr. G. H. Rivière, Laboratoire d'Ethnologie, Palais du Trocadéro, Paris XVI. The subscription of 100 francs for members, and 50 francs for their relatives, covers admission to the Exposition and the National Museums, reduced railway fares, and other facilities.

Symposium on Early Man at Philadelphia: Some Impressions.

162 The International Symposium on Early Man, held to celebrate the 125th anniversary of the Academy of Natural Sciences of Philadelphia, from 17th to 20th March, 1937, was attended not only by all the leading American archaeologists, but by distinguished representatives from Austria, Britain, China, Denmark, Java, Norway and South Africa. In addition to fruitful discussions on the pleistocene chronology of the Old World, the participants were presented with a mass of data bearing upon the antiquity of man in the New World. In its light everyone was obliged to accept as proven the presence of tool-making animals in the south-west of the United States at the same time as mammoth, horse, camel and bison. Agreement was less general as to the absolute antiquity thereby established for man in America. It is admittedly probable that a 'pleistocene' fauna persisted in North America much longer than in Eurasia. Figures in the neighbourhood of 12,000 or 10,000 B.C. were approved by Dr. Antevy and other geologists for the relevant formations, but a date as late as 2000 B.C. was accepted by Dr. Spinden.

From the typological standpoint an archaeologist, trained in Old World systems, can make no positive contribution, but he can state some negatives that may be significant. The Folsom and allied points that are associated with the 'pleistocene' fauna have no exact or really significant counterparts in the Old World. Their bifacial pressure-flaking recalls Solutrean work only vaguely and might be more justly compared to pre-dynastic Egyptian or neolithic Danish techniques. The really distinctive feature of the artifacts—the removal of a longitudinal

flake from each face after the original surface preparation—seems absolutely foreign to the Old World. At the same time the view that the Folsom industries reveal direct precursors of better-known Amerindian stonework, a view voiced by several American participants, appears to an outsider entirely plausible.

But just because these industries, like their familiar successors, are so highly specialized, estimates of man's antiquity must be enhanced to allow time for such aberrant specialization. This impression is fortified by two negative observations. Among many collections of flints of varying ages, both at the Academy of Sciences and in other American Museums visited, I could find no gravers (*burins*) such as are distinctive of the known Upper Palaeolithic and Mesolithic phases in the Old World, and no geometric microliths (comparable to those that characterize many of our Mesolithic industries). Admittedly many Americanists describe as 'gravers' tools pointed by bilateral trimming, that we would term 'awls.' Admittedly, too, not by any means all of our Transatlantic colleagues are really familiar with the graver, as we understand it, and some at least fail altogether to appreciate the great significance we attach to it. Hence gravers may have been ignored hitherto and be merely awaiting recognition in some districts at least. But it is difficult to believe that had such tools been at all common, none would have found its way into any of the numerous and widely scattered collections that I was privileged to examine.

Over against the general impression of profound divergence between the lithic industries of the Old World and those of the New, might be set the striking analogies between certain groups of pre-Columbian pottery and the ceramics of comparable climatic zones in Eurasia. Some of these agreements, *e.g.*, between the painted fabrics of the semi-arid southwest and those of South Russia, Thessaly, Iran or China, are demonstrably due to convergence or at best some common pre-ceramic tradition. But the similarities, stressed by von Richtofen in *Anthropos*, XXVII, between pottery from the wooded north-eastern States and the pit-comb ware of the forest zone of Eurasia appear still more striking when actual sherds from the two areas are compared on the spot. The vases of coarse, badly-fired, layered ware from Maine shell-mounds have pointed bases and are decorated with rows of pits that come out as lumps on the inside of the vessel, precisely as in Finnish *Kammkeramik*. The pits, moreover, are combined with the imprints of comb-stamps, whipped 'cords,' or shell-edges just as in the Eurasian province. The line drawings in Charles C. Willoughby's *Antiquities of the New England Indians* (Harvard, 1935), Figs. 109, 111 and 112, present accurately the vessels' shapes and the arrangement of the designs, but fail lamentably to give an adequate idea of the relevant technical features.

Dr. V. Fewkes tells me that such pottery occurs as far west as Lake Winnipeg and is widely distributed, but always in the woodland area, as in Eurasia. In the same region polished stone gouges and bone

or antler harpoons and leister-prongs occur, similar to those so common on Eurasiatic 'dwelling-places' with *Kammkeramik*.

Nevertheless, despite their number and accuracy, the agreements noted may after all be merely convergent adjustments to a similar environment and a similar economy for its exploitation. Intermediate finds of a like character (say from North-western America) seem still to be lacking. From

the American complex perforated axe-heads of stone or antler (including perforated antler mounts), skis and sledges seem to be absent. But all three devices have recently been found to go back to a very early phase of the Eurasiatic culture in late Boreal or Atlantic times in the East Baltic. Still one will await with expectation further exploration in Alaska and Eastern Siberia.

University of Edinburgh. V. GORDON CHILDE.

REVIEWS

AFRICA.

Stone Age Africa: An Outline of Prehistory in Africa. By L. S. B. Leakey. London. Oxford University Press, 1936. vi+218 pp., frontispiece. 13 plates, 28 text-figures, 1 map. Price 6s.

Dr. Leakey is to be congratulated on the prompt appearance in book form of his Munro Lectures of February, 1936. Those lectures are given at Edinburgh before the general public, and the book is thus planned to appeal to the ordinary reader with a general interest in prehistory. At the same time it is for the specialist the only sketch available of the African Stone Age at large, it is fairly up to date, and it records a good deal of unpublished or scarcely accessible material. A neat, small octavo of little more than 200 pages, yet with 28 good line-drawings (by Miss Mary Nicol), 13 halftone plates, a coloured frontispiece, a folding map, a series of chronological tables, and a very full bibliography and index, it is most reasonably priced by the Oxford University Press at six shillings. To the four mis-spellings of proper names corrected on the errata-slip may be added 'Gardiner' and 'Gardener' for (Miss) Gardner (pp. 27, 114, 211), 'Dixie' for Dixey (p. 10), and 'coup-de-point' for 'point' (p. 127); but though the book must have been written at high speed it is quite easy to read, and the style, though not closely integrated, is that of a clear and openly-speaking lecturer.

The first chapter, on 'Climate and Geography,' is in simple, almost elementary language. Earth-movements, most notably the Rift Valley faulting, and the fundamental Pluvial sequence are handled without undue dogmatism, whatever be thought of the author's own opinions. Dr. Huzayyin's *Glacial Episodes* (MAN, 1936, 20) appeared too late for discussion of *e.g.*, its 'deflationary' view of the Gamblian II-Wurm II correlation, which will doubtless soon appear elsewhere. In the next chapter on Fauna, the doctrine of defining the start of the Pleistocene by the appearance of *Elphas*, *Equus*, and *Bos* is adopted at the outset, and the following pages form an interesting review; the remarks about the beginning of the Holocene on p. 18 might however have been better edited.

Chapters III and IV take us through the whole sequence of East African cultures, from Mr. Wayland's Kafuan pebble-industry through the long Chellean-Acheulean succession established by the author in the Oldoway Gorge, covering the Kamasian (Middle Pleistocene) pluvial period. Interest begins to shift to flake-industries towards the end of this, and as well as the Nanyukian and 'Pseudo-Stillbay' (formerly called Upper Mousterian) which thus arose side by side with the final Acheulean, an early Aurignacian (fig. 6, top row) is also claimed from the Kunangop swamp-deposits which directly precede the main Rift faulting. If this is confirmed it might re-assert the antiquity of the Kenya Aurignacian against the doubts recently expressed by Miss Garrod and others. In any case, the Gamblian Pluvial starts with Aurignacian and Levallois side by side, and

subsequently the former develops on lines already familiar, with the appearance of microliths and pottery, into the Elmenteitan, and thence into the Wilton A of the ensuing Makalian phase of humidity, while parallel evolution from the latter, well attested at Apis Rock in conformity with Uganda, produces the sequence Stillbay-Magosian-Wilton B. To these duplets thereafter correspond the Gumban B and Wilton C of the Nakuran wet phase, when, as well as Gumban A with its distinctive pottery, appear 'Neolithic axe' cultures, the 'Njoroan,' to be distinguished from the more westerly Tumbian—the claim of which to an Acheulean ancestry Dr. Leakey treats with reserve.

He then turns to South Africa, and with Mr. Goodwin's recent summary and unpublished material from Prof. van Riet Lowe before him, surveys what can be traced of a corresponding succession. Here too an initial pebble-industry is now recognized, and the main hand-axe sequence, Lower-Middle-Upper Stellenbosch, is assigned to the Middle Pleistocene. The term 'Victoria West,' often claimed for a distinct industry, should denote simply a distinctive technique for producing (chiefly) cleavers in the Upper Stellenbosch. Suspecting that a Levallois technique was also current, Dr. Leakey handles the final Middle Pleistocene stages with reserve, the more justifiably since the lack of stratified sites is only now, with *e.g.*, Sheppard Island and River View Estates, beginning to be made good. The three stages of the Fauresmith culture occupy much of the Upper Pleistocene, both preceded and followed by a hiatus; the ensuing 'Middle Stone Age' groups, of which the Stillbay is the best known, form of course a sort of Upper Paleolithic. It is noteworthy that some at least of the 'Neolithic' elements which intrude upon the later Wilton and Smithfield cultures appear to be of Tumbian origin. A later chapter deals with Rhodesia, giving a fair summary of Armstrong's Bambata succession: his 'Bambata culture' is neatly identified as the Rhodesian Stillbay, and its extreme developments, with the Sawmills surface material, form the Rhodesian Magosian. It is thus the greater pity that there is no Rhodesian column in the big comparative table facing p. 136.

The undiscovered possibilities of West Africa are emphasized, as they have been recently by Mr. Braumholtz, and future work here will be important not least for prehistory in North Africa. Dr. Leakey gives due prominence to Vaufreys's demonstration that earth-movements there separate the age of the Acheulean from that of the Levallois 'Mousterian' whence sprang the Aterian of Upper Paleolithic times. He comments on anomalies in the Nile valley sequence according to Sandford, and proceeds with greater enthusiasm to the findings of Miss Caton-Thompson and Miss Gardner at Kharga Oasis. It is curious that he attempts no theory of origin for the Capsian, since Miss Garrod has almost simultaneously suggested deriving it from his own

discovery, the Kenya Aurignacian, but he lays proper emphasis on its late date, and (following Vauflrey) on the impossibility of fathering it on to the Lower Aurignacian of Western Europe. He regards Vignard's Sebilian as the result of a Levallois-Capsian contact, but has no precise pedigree for Merimde, the Fayûm, or the Tasian and Badarian civilizations. His table on p. 114 seems to go too far in presenting distinct groups respectively of Aterian, Capsian, and Oranian origin in the North African Neolithic, which, à tradition capsienne in the widest sense only, at present defies further analysis. This indeed is recognized in the text, where however its debt to Predynastic and even Dynastic Egypt could also have been pointed out.

In chapter VIII the various African art-groups are clearly and sympathetically described, and considering the book's limits adequately illustrated. The tailed and antelope-horned human figure recently discovered by Miss Nicol at Afvallingskop in the Orange Free State is of great interest, and the crossed penis in this and another engraving quoted on p. 144, as also in various paintings, seems a detail of some anthropological importance. Of the East African art sequence, studied by the author especially in 1935, he gives a summary which should ensure attention for his forthcoming full publication. In general, he is inclined to regard African Stone Age art as in the main independent of European. In the following chapter on Stone Age Man, he makes subdued reference to the discoveries at Kanam and Kanjera, with the simple general remark that on no authorized current interpretation of human evolution can the general distribution of *homo sapiens* in the Upper Pleistocene yet be reconciled with denial of his presence in the Middle.

The final chapter comparing Stone Age Africa with Europe is generally cautious, and though there is beyond doubt much in the book which will be in time superseded or indeed immediately criticized, it will certainly bear reflective reading.

C. F. C. HAWKES.

Les Rites Secrets des Primitifs de l'Oubangui.

By A. M. Vergiat, with préface by General Bouscat. Paris, 1936. 210 pp., map, 37 photographs and 14 sketches. 25 fr.

The Banda, Manja, Gbaya and Sango people, of whom M. Vergiat writes in this notable book, inhabit the basin of the river Ubangi, one of the tributaries of the Congo, in French Equatorial Africa.

General Bouscat comments in the Preface on the ardent sympathy and will to understand, which gained for M. Vergiat the trust and confidence of the people to an unusual degree. The author of the work has handled difficult subjects with skill, and a vein of French philosophy and idealism runs throughout the book. M. Vergiat is also an expert photographer.

The first chapter deals concisely with the native religion and magic, sometimes throwing new light on old problems, such as the belief of the 'féticheur' in his own 'vocation,' apart from his profession; the continual strife between the souls of the living (les âmes) and the souls of the dead (les mânes); the 'progressive' reanimation of the dead into animal forms, which seem to become family totems; mesentomatosis, etc.

The second chapter describes the mythological beliefs; the conception of a Supreme deity; the Earth deity and his children; the deity of the Waters; the cult of disincarnate souls; the spirit of Sorcery and other 'jinn'; together with the fetiches and magical plants sacred to each. M. Vergiat remarks that even the toxic or therapeutic principle of a plant itself is the object of a cult. In giving a valuable list of plants (identified by

the R.P. C. Tisserant), he states what an important rôle the flora of a country plays in the life of every native. Many of the plants listed by M. Vergiat occur also in Portuguese East Africa, and magical properties are assigned to them there also.

In the third and fourth chapters the Initiation ceremonies of both men and women are fully described with photographs and sketches. M. Vergiat does not say if there is any connexion between these rites and the political organization of the tribes.

The key-note of these rites seems to be that 'Death begets Life' (La mort engendre la vie); and a suitable axiom of these 'rough schools of asceticism, physical endurance and self-discipline would be 'one rises by suffering.' Nevertheless, there are hard facts which cannot be ignored, and it would seem that the aid of medical missionaries would be invaluable in this district, and they in their turn should find this book useful.

The next three chapters describe the secret societies of Ngakola (Manja; Banda), Maoro (Banda), and Badagi (Banda). Ngakola is a cannibal-ogre who appears in various parts of the world as far apart as Australia and South Africa. He appears in the folklore of the VaLenge, Portuguese East Africa, as Nyazimu the Swallower; functional belief in one tribe thus becoming folklore in another.

Chapter VIII describes the secret brotherhoods grouped under an animal sign, such as the Leopard Society. Sensational facts are here recorded in a scientific manner. The remaining two chapters are devoted to the sorcerers' practice of the 'magic needle,' and to the exorcism of the Walaka evil spirits. E. D. E.

The Bantu Tribes of South Africa. Reproductions of Photographic Studies. By A. M. Duggan-Cronin. Vol. IV, Sect. II, Plates XLI-LXXX.

165 The VaChopi of Portuguese East Africa. With an introductory article on the VaChopi, and a bibliography and descriptive notes on the plates by Henri Philippe Junod, B.A., B.D., of the Swiss Mission. Cambridge, 1936. (Alexander McGregor Memorial Museum, Kimberley.)

In this volume the Chopi culture unfolds itself in a series of photographs of high anthropological and artistic interest. Hunters set forth with the typical bows and arrows which have caused this people to be known as the Archers; young fishers are seen on lake or sea-shore; the xylophonists perform on their various instruments; the bark-cloth beaters display their mallets of age-old origin; the wood-carver chips at his food-bowls; iron-workers are using the old type of skin-bellows. The portraits also of the Chopi and Khoka women, with their elaborate cicatrization, form arresting character-studies. The atmosphere of the environment is marvellously reproduced.

But one wishes that it had been possible to include some of the characteristic women's dances, especially those of the nzumba or harvest festival. Also for the sake of clearness, one would have preferred the Khoka photographs to succeed those of the Chopi, instead of being mixed with them, as hitherto the Chopi and the Tonga (Khoka) have been considered distinct units.

The Rev. H. P. Junod, whose knowledge of the subject is unrivalled, has written a valuable introduction on the origin and culture of the Chopi and the Khoka. It is, however, a little misleading to use the terms Thonga and Thonga-Shangaan synonymously, as M. Junod sometimes does, as the Shangaans are properly only the Tshangana group of the Thonga, which is an elastic tribal term as used by the late Dr. Junod.

The relationship to the Chopi and Khoka of the Amatonga clans of the earliest emigration from Zululand

is not discussed. The Angont (Nguni) came very much later during the Zulu occupation of Gazaland. It is probable that there are four distinct strata of the population in Gazaland. An outcrop of the oldest and lowest occurs in the Bazaruto Islands, and probably also among remnants of the Chopi, Khoka, Lenge and Tswa.

The Khoka, according to M. Junod, are 'the people of the hollows' (*khoka* = hollow). The Lenge call them 'the people of the fishing-nets' (*koka* or *khoka*—referring to the fishing nets which the people themselves make).

A misprint occurs on p. 53, where *vavanna* should read *vavanuna*. In the descriptive note to Plate LXXVII *atragali* occurs for *astragali*.
E. D. E.

PACIFIC.

Savage Civilization. By T. H. Harrison. London, 1937. 461 pp., illustrated. Price 16s.

166 This intensely human document has for the anthropologist a triple interest. In the first place, the author 'went native' for over a year, during which time he covered many hitherto unknown parts of Santo and Malekula, and gained deep insight into the character of the natives and a very considerable knowledge of their beliefs and ritual. In the second place, he has, in a style all his own, written a history of white exploration and settlement in the New Hebrides, from the first discovery of these islands by Quiros, 'the Last Conquistador,' in 1606, to Captain Cook, the sandalwood traders, blackbirders, missionaries of at least five denominations, planters of copra, the high (or low) finance octopus of Soap and Coconut Oil Kings, an incursion of Doug. Fairbanks complete with Hollywood technique, and finally the Yellow Peril in the shape of Japanese, Chinese and Tonkinese labour. The sections dealing with these, and with the incredible barbarities meted out by all of them on the defenceless and at first friendly natives, should by no means be neglected by the student of culture contact, since, as Mr. Harrison points out, they are but the latest (but by no means will be the last) migration of a large and complicated nature into these islands, in which already half the older cultures of the world have met and mixed. His third contribution is a bold (but not too bold) analysis of the Anglo-French Condominium—he calls it the Pandemonium Government—which for the last 30 years has misruled these territories. The author being no respecter of persons and at the same time having an easy knack of absorbing both events and records, his method of dealing with the various phases of contact is unique in its combination of humour, erudition, and real understanding, not only of the innumerable white influences concerned, but of the reaction of the natives to them.

Here we are chiefly concerned with the more strictly anthropological material; it must firstly be said that Mr. Harrison, after previous expeditions to Borneo, went out to the New Hebrides as an ornithologist with no expert knowledge of anthropology. His interest in the natives began with the study of sex ratio, which led on to the taking of a census of the entire populations of Santo and Malekula, as well as of other islands, to the climbing of many mountains, and so by degrees to living with the natives as nearly as one of themselves as any white man can do. The book opens with a soliloquy from the top of Mount Tabwemasana on Santo, whence in early morning before the mist rises the view stretches southward to the cane-topped mountains of Malekula and the volcanoes of Ambryn and Lopevi beyond. In a long chapter called 'Persons' a native is made to speak, telling of life before Quiros. The book unfolds itself, as an Elizabethan drama, with scenes, short and long, trenchant sketches of black and white kaleidoscopically mixed. Of the chapters chiefly devoted to the natives the headings will give an idea of the author's treatment:—'Persons' (as we have already seen), 'Waves,' 'Impressions,' 'Depop' (depopulation; Harrison reckons from 1,000,000 to 45,000 since the white man's arrival), 'Migration,' 'Character,' 'Art,' 'Black Hope' (it is on this note that the book is built), 'Ironie,'

'Pieces of Espiritu Santo,' and 'Cannibal 1935,' this latter dealing with the Big Nambas tribe of Malekula. Mr. Harrison, in these titles and at frequent intervals throughout the book, adopts a light vein as a concession both to his own vitality and to the needs of publication, but this does not mean that he is not also a serious student. He is also remarkably free of white man's superiority complex, and freely acknowledges how much he himself learnt from the natives. He did this, he tells us, "from experience, rather than observation or question." "By patience, by looking and behaving " as unlike a white man as possible, by establishing " myself as a hunter, and, above all, as a kava booze- " artist of first rank, thus I was able to move freely and " unarmed all over this country." " I found I could " live native, or near it. Their food and sleep, kava, " mealtimes and laughter suited me." These few quotations give some hint of the reason of his success. " You don't get drunk on kava. But it speeds up your " increasing slowness. Thoughts come cleanly. You " feel friendly, you cannot hate with kava in you." Besides its well-known function as peacemaker, kava, he tells us, is a prophylactic against blackwater fever and gonorrhoea. And it induces talk—" talking out the day " and its full incident with that accuracy and pattern " of beauty in words we have lost." Though his book is not arranged for anthropologists, and the author 'kept " no diary and made no general notes," though, in Malekula, whence come his chief native accounts, his medium was pidgin English, the work is, nevertheless, a mine of information on native life. Warfare, cannibalism, the incredibly complicated ritual of sacrifice and of monetary exchange in tusked pigs, rites in the first place designed to honour the ancestors and to advance a man in this world and the next, now used also by way of loading a man with too many gifts, to bring him to shame because he can't repay; magnificent descriptions of dances—thrilling to read, though lacking detail for the student; gong language; a trade cycle in which the stages are tusked pigs, shell money, red mats, hermaplirodite pigs and leaves used for dying; chiefs so sacred that they are fed with a special food to make them fat and so almost unmoveable; ritual sacrifice of bastards; all these things and many others are to be found in this many-sided account. And then " I had almost forgotten " the art of love." But Mr. Harrison's really strong point is on the native character, which colours all his accounts. " I reject the school of thought that the " native way of thinking cannot be understood by the " white, that the black way is fatal to the white way." He rejects also exaggerated psychological theories on the will to die. There is a discussion on migrations in which Mr. Harrison disagrees with all other authorities, and, basing his argument on winds and currents, seeks to derive all later aspects of New Hebridean culture as coming from east or south. That some such influences have made themselves felt is certain, but I am inclined to think the author gives them too much weight. He is also, in his account of north Malekula, and with the idea of making easy reading, not always too careful to state to what parts of the island or islands information culled from other sources belongs. This is a fault of quick writing, and does not worry the author, who seeks

to create an impression rather than to write an exact treatise. This he certainly does, for the work is a marvel of artistry, with many-sided interest. The final and ever-present question is Black versus White. "We have brought these people low, with our twin curses, the germ and the gun," "our easy confidence" and "our belief that we are the only civilized ones." "It is lucky for the complacent whites in the New Hebrides that there is an infinity of tribes . . . If one man arose who could weld together even a part—things would go very differently." Even now, there are signs. "In this history it has been the white man who has needed an advocate; for we cannot justify his bloody actions, they are not part of what we talk about as our civilization." "Here, as in many parts of the world, the black man is on the come-back," and on some of the healthier islands is ousting the inheritors of those who for a few sticks of tobacco tricked him of his land, and it is of especial interest to the reviewer that the man who got him initiated on Atchin now has his own coconut plantations and copra store, as well as his four wives and his high place in the megalithic hierarchy.

Illustrations, index and a large bibliography deserve special mention as well as special bibliographies to individual sections. References rarely occur in the text, but a card index dealing with white contact has been lodged with the Royal Geographical Society. In a farewell summary after the index we learn why the author does not sit down and write the anthropological treatise he might; because he has it in his blood to head for central-somewhere and learn to cut down a tree with a stone-axe while there is yet time. We wish him luck. JOHN LAYARD.

Maori Music with its Polynesian Background. By Johannes C. Andersen. *Memoirs of the Polynesian Society*, Vol. 10. New Plymouth, N.Z. (Thomas Avery & Sons), 1934. x+483 pp. Price 42s.

From a writer of Mr. Andersen's accomplishments, the author of admirable work on New Zealand bird-song and Maori musical instruments, one has the right to expect an authoritative study. But this expensive book, even though it is stated to be no more than an introduction to the subject, is disappointing. Approximately the first 200 pages are taken up with extensive quotations from earlier writers, the value of which would have been greatly increased by compression and an analysis of the musical examples, which are reproduced

without comment. There is a quantity of irrelevant illustrations, including fifteen reproductions of scenic views from Barraud, Gully and Hochstetter, the only connexion of which with Maori music is that they show parts of the country in which the tribes who took part in a reception to the then Duke and Duchess of York in 1901 had their homes. The section on the Maori dance again consists principally of material already recorded, the *pièce de résistance* being a forty-page excerpt from the official account of the reception just mentioned. Since much of this account was written by Sir Apirana Ngata, an acknowledged expert in native dancing, the pertinent data are valuable, but do not make up for the absence of any systematic treatment by the author, whose few pages of descriptive commentary add little to our knowledge of the subject.

The two most useful sections are on Polynesian musical instruments, and the qualities of Maori music. By his own experiments on Maori flutes Mr. Andersen has been able to correct a number of misapprehensions, to establish the method of blowing and, in the case of the *koauau*, to show that the holes did not represent an agreed set of intervals, although there were certain intervals that pleased the native ear more than others. His analysis of the *nguru* shows, too, that this was more probably a mouth-blown whistle than a 'nose-flute' proper. His analysis of Maori songs draws attention to the transformation which the native melody has usually suffered when 'collected' by a European musician, and emphasizes how many of the popular 'Maori' melodies of to-day are really native adaptations of European sacred or secular tunes. He observes also that beyond recognition of the *no n rangi*, the harmonic or a fifth above the octave, and occasional incorporation of it, the old-time Maori did not sing in harmony. More than once the difficulty is stressed of transcribing Maori songs into our notation, even with expanded conventions, and it is argued that the Maori is able to recognize and use consistently intervals more minute than a quarter-tone. To establish that such small intervals are really intentional and consistent, more evidence would be welcome.

It is to be hoped that the author will follow up this and other matters in a more systematic detailed monograph on Maori song, for which the records accumulated by the energy of Mr. Andersen himself, Sir Apirana Ngata and the Maori Board of Ethnological Research have laid a most valuable foundation. RAYMOND FIRTH.

BIOGRAPHY.

Richard Burton, Explorer. By H. J. Schonfield. London: Herbert Joseph. 303 pp.

168 Richard Burton was born out of due time. Vain, quarrelsome, restless and adventurous, he would have been thoroughly at home under Elizabeth, but was a misfit in Victorian England. Burton first discovered his remarkable faculty of living a dual existence in Sind, where he was a British officer by day, and Mirza Abdullah of Bushire by night. This encouraged him to undertake his more famous pilgrimage to Mecca, surely one of the most remarkable feats of its kind in the history of exploration. Burton was a great practical joker. Some of his pranks, e.g., burying an 'Etruscan' pickle-jar in the path of the archaeologists, were merely

amusing; but the wild attempt to kidnap a nun from a Goa convent might well have proved serious. The quarrel with Speke over the discovery of Tanganyika brings out the least agreeable side of his character. Victorian England pretended to be deeply shocked at the famous translation of the *Arabian Nights*, but bought it surreptitiously in enormous quantities; an expurgated edition was a 'flop'! Equally amusing was the outbreak of Protestant indignation when his devoted wife buried him with 'Romish rites'! Mr. Schonfield has given us a sympathetic and thoroughly readable life of this complex and wayward man. It would be greatly improved by the addition of a few more illustrations and maps, and, above all, by an index. H. G. RAWLINSON.

CORRESPONDENCE.

The Fire-Piston in South India. (Cf. MAN, 1935, 112; 1936, 93.)

169 SIR,—My identification of certain objects from Adichanallur as fire-pistons (MAN, 1935, 112) has been objected to by Mr. Sirkar (MAN, 1936, 93), but

confirmation of my views has just come unexpectedly. When Mr. Aiyappan of this Museum and I were together examining the specimens a few days back, our attention was devoted especially to the one that is best preserved and has retained the base unbroken (MAN, 1935, 112,

Fig. 1). Mr. Aiyappan was more fortunate than I had been in getting the rod to move in the socket and, on pulling the rod out, we found a little paddy-husk adhering to its end. With a little probing of the interior of the cylinder with a sharp needle, a small quantity of husk was obtained. With the rod fitting tightly into the socket it should be difficult to imagine that the husk got in accidentally. Paddy-husk is well known to be capable of both catching fire easily and of keeping the fire smouldering. Indeed, it is this property of paddy-husk that has enabled people from primitive times to keep their domestic fires alive from year's end to year's end. The specimen in question was apparently a useful contrivance which must have served the double purpose of producing fire and of keeping it alive when produced. The narrow and uniform bore of the cylinder with its tightly fitting piston are characteristics not found in a mortar and pestle, whereas these are essential to the efficiency of the fire-piston. The other specimens (*i.e.*, Figs. 2 to 4) must have presumably served a similar purpose, though the evidence in respect of these is not so conclusive.

M. D. RAGHAVAN.

Government Museum, Madras.

Myth and Ritual. (Cf. MAN, 1936, 267.)

170 SIR.—In MAN, 1936, 267, Prof. H. J. Rose declares himself a lover of science, not of gratuitous hypotheses. We must take it then that the following propositions on which his case depends are facts, not hypotheses:—

1. That Homer believed his *Iliad* to be a true description of events.
2. That if a man believes a story to be real it must be real.
3. That notwithstanding clause 2, if he believes anything to be real, which we think impossible, such as turning into an owl, then it is not real.
4. That the date of the *Iliad* is very near to the events it describes.
5. That the Homeric Greeks had funny minds which could not describe a war without dragging in gods and fabulous creatures.
6. That the *Iliad* and other Greek myths are Hellenic, and not by any possibility Minoan, Phrygian or Hittite, and least of all pre-Minoan or Indian, just as we know our own Biblical myths to be Anglo-Saxon, and not Roman or Hebrew.
7. That a myth never outlives the ritual it describes, and never spreads beyond the area of the associated ritual.
8. That we know every Greek ritual that ever was, and therefore a ritual unknown to our Hellenists cannot have existed in Greece.
9. That a mythical plot or episode, which cannot at once to order be paralleled with a rite, never can have been a ritual.

It is rather unfortunate that Prof. Rose should have chosen Grimm's *Fairy Tales* as plots and episodes that cannot be explained as rites, for there is no richer mine of plots and episodes that can, *e.g.*, slaying the dragon (Ancient India), making the princess laugh (Rotuma), waving the sword three times to disperse demons and becoming king (Cambodian coronation), turning into and out of animals (the world, *passum*), ordeals (*do.*), smearing a statue to give it life (*do.*), coming to life again (*do.*), winning the bride (Indian *sayamvara*), etc., etc.

Only before anyone sets out to test the ritual theory on Grimm or on Greek myths he must first make himself thoroughly acquainted with all the varieties of ritual, secondly, take the trouble to understand the hypothesis. No one ever suggested that the Greeks threw stones

over their shoulders believing they would become men. Prof. Rose will accuse us next of saying that the Hebrews took ribs out of their men to make women. The ritual hypothesis tries to reduce myths to observed facts, and it is an observed fact that men are reborn from the ritual, and that they often derive life from stones (*e.g.*, Eusebius, *Præc. Evang.* I, 10, 16; Hocart, *The Progress of Man*, 149f; *Kings and Councillors*, 232; etc.).

Since Prof. Rose is joining the ranks of science may he be received according to the common pattern of imitation which includes an admonition. As text, I would suggest the words of a great physicist: "A scientific theory should be considered as a policy, rather than as a creed." The ritual hypothesis claims to be no more than a policy for research, not like the historicity of the *Iliad*, a final doctrine which shuts the door on all attempts to find something better than a cumbrous system of hypotheses involving processes (*e.g.*, No. 5) which have never been observed.

A. M. HOCART.

Modern Obsidian Artifacts from Southern Ethiopia.

171 SIR.—In 1934 and 1935 I had the pleasure of assisting Mr. A. T. Curle in his investigations of the ruined Arab towns in British Somaliland. In the vicinity of these towns and also along some of the old established caravan tracks in the western part of that country we came across a large number of obsidian flakes on the surface of the ground.

A year later, 1936, I was 'trekking' through the Sidamo District of Southern Ethiopia and came across some similar flakes lying on the caravan track. This was within a few miles of Agheresalam (38° 40' E., 6° 40' N.). I made inquiries about them through my interpreter and I was told that the local natives were using similar flakes for scraping and cutting purposes. In answer to my question as to where they obtained the flakes, I was told that the obsidian came from a long way away. A lump of it was sometimes brought by a caravan and sold in the market. The purchaser would then break it into flakes. Unfortunately I was travelling fast and against time. I was therefore unable to make a halt in this locality and with my own eyes to see the natives actually using the flakes.

R. H. R. TAYLOR. *Captain.*

Death and Mourning Celebrations on Normanby Island. (Cf. MAN, 1937, 57.)

172 SIR.—I have read in MAN, 1937, 57, a summary of a communication by Dr. Röheim on 'Death and Mourning Celebrations on Normanby Island.' In it I find statements: "monkeys eating their dead children" and "eating the belly of the deceased in a pudding."

But there are no monkeys on Normanby or indeed anywhere in Papua; and cannibalism ceased on Normanby many years ago. Surely there must be some mistake.

J. H. P. MURRAY.
Government House, Port Moresby.

Correction. (Cf. MAN, 1937, 129.)

173 SIR.—Three printing errors occur in my letter, MAN, 1937, 129. They are as follows:—

4th paragraph, 7th line. 'out' should be 'our.'
7th paragraph, 2nd line. 'N-horizon' should be 'M-horizon.'

8th paragraph, 4th line. 'notilocal' should be 'not local.'

The first and third of these errors are unimportant as far as I am concerned, but the second entirely alters the sense of my text.

T. P. O'BRIEN.



TWO NEOLITHIC IMPLEMENTS FROM FRANCE OF UNUSUAL SIZE.

Chicago, Field Museum of Natural History. Nos. 217506-7.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 174-185

SEPTEMBER, 1937

ORIGINAL ARTICLES.

Neolithic.

With Plate I-J.

Field.

TWO NEOLITHIC IMPLEMENTS OF UNUSUAL SIZE. *By Henry Field, Field Museum of Natural History, Chicago.*

174 The objects illustrated in Plate I-J were excavated by Mr. L. Coulonges in the neighbourhood of Sauveterre-la-Lémance, Lot-et-Garonne, France. The flint and jadeite celts measure approximately 28 by 7 by 3 cms. According to the Abbé Henri Breuil, these two celts are among the finest Neolithic examples found in France. The two specimens (F.M.N.H. Nos. 217506, 217507) are on exhibition in the Hall of Stone Age of the Old World, in the Field Museum of Natural History, Chicago.

Africa: West.

Beasley.

'THUNDER-BOLT CELTS' FROM BENIN. *By Harry G. Beasley. Illustrated.*

175 Balfour as far back as 1903 drew attention to the occurrence of prehistoric stone celts mounted in lattice-like bronze mounts (MAN, 1903, 102.) He proposed the theory of the appreciation of prehistoric stone work by a more modern people conversant with metal, and this is further brought out by the common occurrence of stone adzes cast on the flanged bases of the ordinary type of Benin bronze head, and also of celts held prominently in the hands of two bronze

figures at Berlin. (F. von Luschan: *Museum für Völkerkunde*, Berlin, 1919.) In recording the occurrence of what is obviously a pair of these objects joined by a crudely made brass chain, there is one outstanding feature which should be noted. Fig. 1 in Balfour's article is stated to be a real stone axe, whilst Figs. 2 and 3 are replicas in bronze. With the pair under discussion ordinary flat waterworn pebbles have been substituted and it would seem therefore that failing the supply of the original stone axes, substitutes were permissible and these might equally well carry with them the 'mana' attached to the old axes.



FIG. 1. 'THUNDER-BOLT CELTS' FROM BENIN.

Beaglehole.

CULTURAL PEAKS IN POLYNESIA. By Ernest Beaglehole, M.A., Ph.D., Bernice P. Bishop Museum, Honolulu.

176 To bring system into a large mass of otherwise inchoate data, it is customary to consider Polynesian culture as divided into a number of sub-culture areas. These are geographical areas in which a number of arbitrarily selected culture elements are thought sufficiently distinctive to merit classifying the areas as being the spatial limits of a sub-culture. Various names have been applied to these sub-areas. The most common working classification is that which distinguishes between western Polynesia (Tonga, Samoa, etc.), eastern or central Polynesia (Tahiti, the Austral islands, the Marquesas, Cook islands) and marginal Polynesia (Hawaii, New Zealand). This last is divided by some into northern (Hawaii) and southern (New Zealand) sub-areas. As a first approximation some such classification as this is reasonable. As yet there has not been a sufficiently intensive study of all the material to warrant more than the fewest generalizations as to the ultimate validity of these sub-areal differences. Closer studies of isolated geographical groups within a wider area suggest that homogeneity of cultural traits is often less marked than differences. Thus differences in material culture, art styles and social organization between the islands of the lower Cook group (Rarotonga, Aitutaki, Mangaia, etc.) are such as almost to imply that here each island possesses in its own right a sub-culture that is only generically linked to that of eastern Polynesia proper. Similarly Skinner's tentative delimitation of culture areas in New Zealand¹ is likely to be more, not less, firmly established by closer attention to details, though a final scheme will vary somewhat from that proposed by Skinner. Such close study proves to the Polynesian specialist that there may be as much cultural variation in a relatively large and continuous land mass as in a group of islands separated from each other by a hundred miles or more of ocean.

The 'culture area' concept is of great value in Polynesia. The sub-areas that are finally established and the historical reconstructions therefrom are likely to assume greater value when

intensive studies now under way are brought to that stage of completeness which will enable the student to move with definite surety among a multiplicity of data. Here I wish to suggest that in setting out to emphasize areal differences the student should not forget that areal similarities, and more than this, specific areal developments of institutional forms common to the widespread and fundamental Polynesian pattern of culture, are of great importance. It is these areal developments that I call cultural peaks. The concept of cultural peaks seems to complement the idea of cultural areas. It places the emphasis at one and the same time on similarities and differences whereas the area concept by definition sets boundaries in terms of established differences.

The danger of pushing the area concept too far is that of forgetting that there is an underlying homogeneous cultural stratum throughout Polynesia which gives meaning to established differences and that on top of this stratum there has been in many islands a specific elaboration of a pattern common to all island groups. By specific institutional development, the process of which is for the most part obscure and has presumably been due to historical factors, environmental limitations and freedoms, economic causes or the influence on culture of marked personalities, certain Polynesian islands or cultures show peaks in which complexes or elements have been selected from a widespread pattern and given a formal elaboration. In most instances we may study only the end result. In one or two fortunate cases we gain insight into the process. Te Rangi Hiroa's analysis of the evolution of warrior power in Mangaia is most illuminating in this connexion. Or, again, Archey's reconstruction of curvilinear patterns in Maori carving gives insight into stages, if not causes, though the why and wherefore of such development, and the influence upon it of individuals with unusual artistic and creative imagination, is forever lost.

A few examples will clarify what I conceive to be a cultural peak. I select them at random from social organization and material culture. Warfare was common in most Polynesian cultures. The warrior tended to be a man of high social status. Nowhere else, however, were the rewards of war so high as in the islands of

¹ Skinner, H. D., *Culture Areas in New Zealand*, J. Polyn. Soc., xxx (1921), 71-78.

Mangaia. The leader of the successful war party assumed the supreme temporal power over the whole island and could depose the hereditary high priests: his leading warriors assumed chieftainship over districts, his lesser warriors received large grants of land; the warrior killed in battle went to a special warrior's paradise, there to fraternize with his comrades and opponents. The remainder of the population at death had to face the oven of the cannibal goddess Miru in a common Underworld. Even to-day, in Mangaian land disputes, one suitor will often be able to discomfort his opponent by asking with deadly and pointed emphasis: 'Was *your* ancestor a warrior?' The implication is plain. No one not descended from a warrior can possibly have valid claim to land.² This esteem developed for war and the warrior is peculiar to Mangaia. It is the development of a common Polynesian pattern, a development which may have occurred to a lesser degree elsewhere but which reached its highest point in Mangaia.

Another example is suggested by the institution of chieftainship which, with its concomitant emphasis on the class division of society, its elaboration of the concepts of chiefly power and the tapu whereby this power is socially validated, reached its highest peak in Hawaii. Here the whole emphasis in social organization was upon the supreme social and spiritual power of the high chiefs. The enforcement of these powers by the rigorous application of a system of reservations and prohibitions was well established and highly complex. The high chief was the ultimate controller of all the land under his jurisdiction. In theory he could dispose of it and of his subjects living thereon as he pleased. The class system was explicitly formulated, rigorously implemented. Brother and sister marriage, or marriage of closer kin than was usually customary elsewhere in Polynesia, was socially approved and demanded for particularly chiefly members of the chiefly class. Chieftainship of a greater or lesser status is common to all Polynesian cultures. Elsewhere, save perhaps in Tahiti, there was always some tinge of conscious tribal unity to give a certain pale east of democracy to its otherwise complete absolutism. In Hawaii, chiefly absolutism was carried to its highest development, and incidentally proved

highly unstable when pressure of European contact became acute.

There are enough instances to the contrary to imply that institutional elaboration need not necessarily occur in one island or group to the exclusion of other areas. There may be an almost equal development of the same complex in two or more areas, though such development is likely to be slightly different in each area of its occurrence. In terms of this one cultural complex, therefore, one must visualize several cultural peaks each of a different form from the other. Sorcery is an institution where this multiple development is most marked. Sorcery was practised throughout Polynesia. Elaboration in Tahiti, Hawaii and New Zealand is in terms of both material object and specialized ceremony, the latter being curative in Tahiti, revengeful in Hawaii and protective in New Zealand. Setting western against eastern techniques it is obvious that the eastern methods have reached a cultural peak, or more exactly a triple cultural peak that differentiates it from the common pattern shared by both east and west.³

A final example is the local development of the economic guild in Samoa. Working parties under the leadership of a skilled craftsman are a common Polynesian method by which much large-scale production of wealth is carried on, whether the cultivation or harvesting of land, the building of houses or, to-day, the making of copra. But this organization, called into being by the need of the moment, disbands once the work is done. In Samoa the builders' guilds were not ephemeral. The organization of house builders into a society of craftsmen had a permanent existence. The leader of each society had high social status. Contracts were entered into between builders and prospective house owner. On occasion, it was perfectly legitimate for the builders to strike, leaving the house uncompleted and under *tapu*, because proper ceremonial form had not been observed. The guild has much power, dignity and ceremonial status. For whatever reason, there has been great Samoan institutional development in this type of economic organization.

Cultural peaks are common also with material forms. Wooden houses with thatched roofs are

² Te Rangi Hiroa, *Mangaian Society*, Bishop Mus. Bull., 122, p. 161; and personal communication.

³ Buck, Peter H., *Regional Diversity in the Elaboration of Sorcery in Polynesia*, Yale University Publications in Anthropology, No. 2, 1936.

common in Polynesia. In Samoa again, however, there has been developed the most technically advanced type of house construction in Polynesia. Probably this technique owes something in its elaboration to the existence of a craftsmen's guild which in turn uses its skilled techniques to develop social status. In plaiting, Samoan fine mats, used as ceremonial skirts and counters of economic value, mark a high peak in fine check work, though the Hawaiian crafts-woman was capable at times of technically finer work.⁴

The use of sennit for lashing cords is common in Polynesia. Samoa and Mangaia seem to have been two areas where there was the greatest local development in the technique of making artistic designs in the application of sennit lashings to house framework. Again, in Mangaia there was high development and a marked artistic sense displayed in the hafting of adzes, both lashing technique and finished lashing design being superior to any found elsewhere. Similarly one may regard the craftsmanship in stone of the Easter Islanders as displaying a marked elaborateness of form, which, though based on a common Polynesian use of stone, has advanced in its control of material to a high level.

Finally there is Maori carving. For whatever reason, but perhaps partly conditioned by an abundance of soft woods as well as sharp stone and jade adzes, the Maoris elaborated the forms of their carved objects with freedom and skill. One may here follow Archey in his conclusion that Maori wood-carving patterns are an independent local evolution in New Zealand based on the common Polynesian habit of using the human figure, and that they show

both great elaboration and splendid curvilinear development.⁵

I have made this random sampling to suggest both the frequency of local developments in Polynesia and the freedom with which the Polynesian took common patterns and elaborated them with an attention to form and detail that brings us very near to a definition of art itself. One may conceive Polynesian culture as a congeries of sub-cultures that tend to differentiate themselves rather sharply from each other. One may also conceive it as a widespread series of interlocking patterns, from which first one group and then another has chosen particular patterns for special development. By studying the local use of patterns common to the area as a whole one may get some idea of the cultural profile of a specific pattern—a high development here, a low there, a moderate development elsewhere. The final picture presented by a series of superimposed cultural profiles may not be so clear as that given by a view which sees only sub-cultures. At least, however, one will be less likely to accept a cultural peak as characteristic of the whole of Polynesia and use this peak (rather than the common pattern) as one term in a comparison that spans, say, Polynesian and Melanesian. Likewise in seeing development always in terms of basic pattern, one gains increased appreciation of the bewildering variety in Polynesian cultural forms. In sum, the emphasis on cultural peaks allows one to understand special developments in terms of a generic Polynesian culture, a generic culture in the light of its special achievements. Ultimately a group of local developments in one island or small area may or may not coincide with an established sub-culture area. This may be determined only by detailed study.

⁴ Te Rangi Hiroa, *Samoa: Material Culture*, Bishop Museum Bull., 75, p. 668.

⁵ Archey, G., *Maori Carving Patterns*, J. Polyn. Soc., xlv (1936), p. 58.

THE BOATS OF VICTORIA NYANZA: I. By G. W. B. Huntingford.

177 In his interesting and suggestive paper in the *Journ. Roy. Anthropol. Inst.*, 1934, LXIV, (5).¹ Mr. Hornell claims that a certain type of boat used on Victoria Nyanza is of Indonesian origin. He also considers that the outrigger canoes of the Swahili coast are of Indonesian origin, for which he has made out a good case. But it is otherwise with the Nyanza boats. These

have, as he says, two marked peculiarities of construction:

- (1) A bifid bow (Fig. 1).
- (2) Penetration of the thwarts through the side planks.²

These two features, he says, are features of Javanese and Maduran construction. It may be noted, though, that the Javanese bifid prows

¹ Numbers in brackets refer to the Bibliography.

² I omit here his third peculiarity, the method of closing the seams.

figured in (3) and (5) are not very close to the Nyanza prow. The design of the Nyanza boats is due, he believes, to a possible Indonesian migration to the Kenya highlands, or at least to a "long-continued contact with Indonesia along the coast of East Africa" (5. p. 325). The

admits (5. p. 325), do the bifid prow and projecting thwarts appear on the East Coast: he explains these differences by a process of simplification or degeneration. We may ask, too, how it happens that there are no other traces of Indonesian influence in the Lake region.³

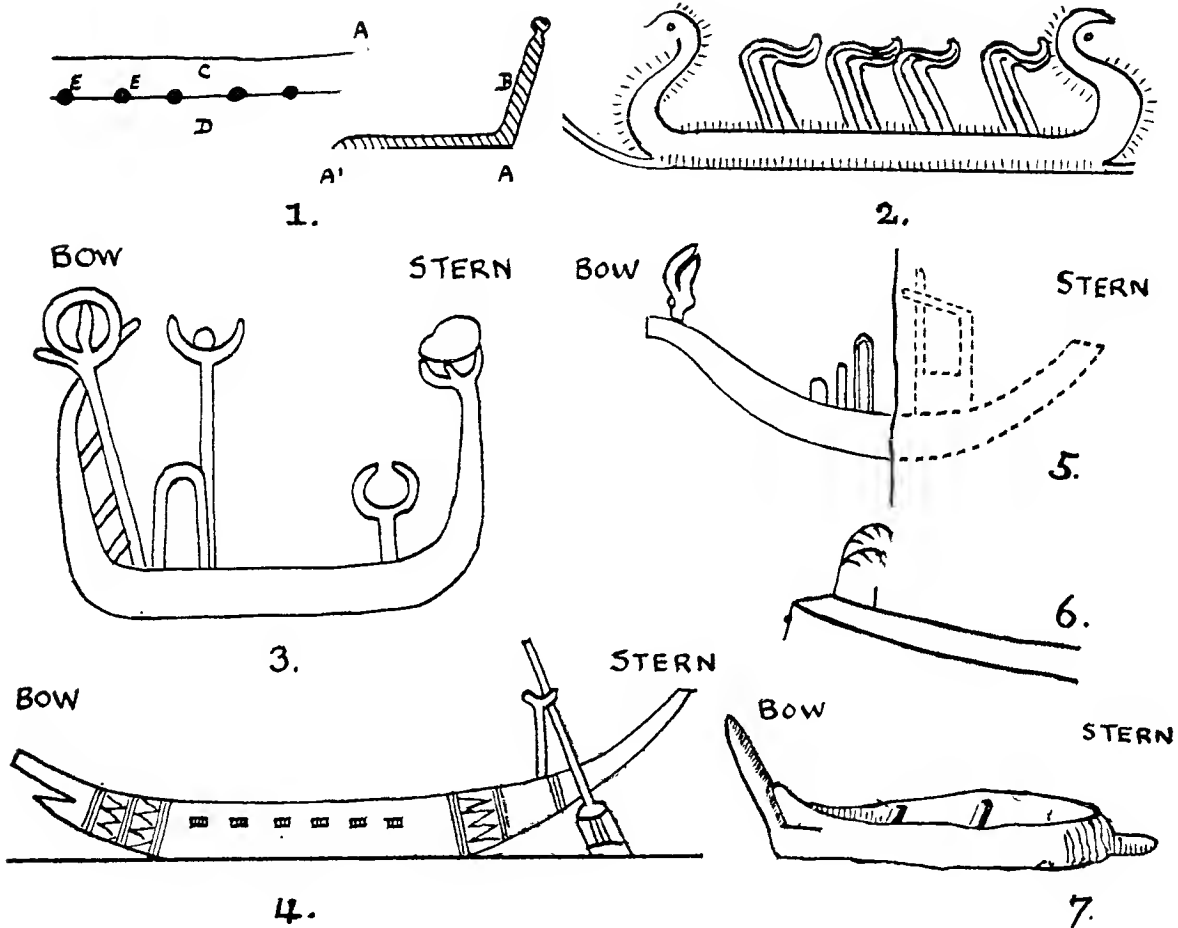


FIG. 1. SECTION OF VICTORIA NYANZA BOAT.

A—A Bifid prow. B—False prow lashed to A'—A. C—Upper strake. D—Lower strake. E—Projecting ends of thwarts.

FIG. 2. SCANDINAVIAN SHIP WITH BIFID PROW. (Lubbock (Avebury), *Prehistoric Times*, ed. 7, fig. 46).

FIG. 3. BOAT FROM THE GEBEL-EL-ARAK KNIFE (upper line).

FIG. 4. HULL OF EGYPTIAN BOAT WITH BIFID PROW AND PROJECTING THWARTS.

FIG. 5. BOAT FROM THE GEBEL-EL-ARAK KNIFE (lower line).

FIG. 6. BRANCH IN THE BOWS OF A PRE-DYNASTIC EGYPTIAN BOAT.

FIG. 7. CRETAN BOAT WITH BIFID PROW. (*J.R.A.I.*, IV.)

outstanding, and indeed the only remarkable, feature of the coast canoes is the outrigger, to which we may certainly allow an Indonesian origin. But the Nyanza boats have no outriggers, although sudden storms can make the lake just as rough as the sea. Nor, as Mr. Hornell himself

Some years ago Sir Grafton Elliot Smith suggested that the Nyanza boats were modified from an Egyptian prototype, which was also the

³ Attempts to connect Bantu and Indonesian languages (e.g., P. Schumacher in *Bibl. Africana*, iii. 215 ff.) are not convincing.

original of the boats with bifid prows depicted on Scandinavian petroglyphs and knives (Fig. 2), and, through Scandinavia, of the Indonesian type (7). The Scandinavian form actually resembles the Nyanza prow more closely than any. He seems to have relied chiefly for his evidence on the ships carved on the handle of the Gebel El-Arak knife (6), none of which, however, has any of the features required (Figs. 3, 5). Mr. Hornell was willing to admit a relationship between the Indonesian and Scandinavian types, but could not see Egypt as the common source (4).

From the evidence available it seems that the Nyanza boats are more probably to be connected with Egypt than with those of the East Coast of Indonesian origin, for (1) the Nyanza boats have nothing in common with the coast boats, (2) there is no sign of any Indonesian influence in the Kenya highlands. And, as Fig. 4 shows, there is a distinct resemblance between the construction of a certain type of Egyptian boat and that of the Nyanza canoes, including the bifid prow and the projecting thwarts.⁴ The Egyptian bifid prow, it may be noted, resembles the Indonesian (3, Fig. 3) more closely than either resembles the Nyanza. Typologically, therefore, the Egyptian has as much claim as the Indonesian to be considered the parent of the Nyanza form. We may note, too, that the boats in the lower line of the Gebel El-Arak knife, while they show no other features found in East Africa, have a pair of horns fixed on the prow (Fig. 5), as in Stanley's figure reproduced by Elliot Smith (8, 7).

The enlarged false prow of the Nyanza boats may perhaps be regarded as an African adaptation, without knowing what it meant, of the branch which is found on early drawings of Egyptian boats (*e.g.*, from Hierakonpolis and Naqada: see 'Ancient Egypt,' 1914, p. 32; 1923, p. 97; 1924, p. 83) (Fig. 6). On Victoria Nyanza it has degenerated to a mere ornament, and the builders no doubt found it easier to lengthen the lower fork of the bows and to bind the false prow on to it, than to fix a post in the bows proper, for the mentality of the African is

such that the simplest and most obvious way of doing a thing often does not occur to him. The people who adopted this type of boat may have been Nilotic; for, although it is now used by Bantu, two of the names of its parts, as given by Mr. Hornell (3), viz., *gammi* = projecting horns of front thwart, and *banga* = thwart, appear to be Nilotic words (Luo *gama* = project; Dinka *bang* = divide), and suggest that the Bantu took it over from the Nilotes.

The question arises as to whether the bifid prow of Egypt originated in that country or elsewhere. A clay model of a Cretan boat (Early Minoan I) has what looks remarkably like a bifid prow (Fig. 7); and it appears that the shape of Egyptian boats may have been altered by Cretan influence (2). Are we, then, to look to Crete as the source of both the Egyptian and the Scandinavian types? This question is one that I am not competent to investigate, though it is to be hoped that others better qualified will do so. Meanwhile, apart from the ultimate origin of this type, there is justification for regarding its occurrence in East Africa as due to Egyptian rather than Indonesian influence. Connexions with Egypt of various kinds—in religious beliefs, material culture, and language—are found all over Africa north of the equator, while we cannot lay our fingers on a single Indonesian link. That Indonesian influence was not felt in East Africa except at the coast is probably a matter for regret, because the East African natives would doubtless have been improved by absorbing some of the culture of a higher and more intelligent race.

BIBLIOGRAPHY.

1. CLARKE, SOMERS: Nile Boats. Ancient Egypt, 1920, 2 ff.
2. EVANS, Sir A.: The Early Nilotic, Libyan, and Egyptian relations with Minoan Crete. J.R.A.I., 1925, iv, 199 ff.
3. HORNELL, J.: Indonesian Culture in East Africa, MAN, 1928, 1.
4. HORNELL, J.: Letter on the same, MAN, 1928, 78.
5. HORNELL, J.: Indonesian influence on East African Culture, J.R.A.I., 1934, lxiv, 305 ff.
6. PETRIE, Sir FLINDERS: Egypt and Mesopotamia. Ancient Egypt, 1917, 26 ff.
7. SMITH, Sir G. ELLIOT: The Boats on the Victoria Nyanza. MAN, 1928, 41.
8. STANLEY, H. M.: Through the Dark Continent, i, 450, 451.
9. WILKINSON, Sir J. GARDNER: Popular Account of the Ancient Egyptians, 1854, ii, 127, 167.

⁴ Fig. 4 is from the tomb of Ramessu III at Thebes, after Wilkinson, who thought that the projecting ends of the thwarts were merely a "line of small squares like false windows" (9). See Somers Clarke (1).

THE BOATS OF VICTORIA NYANZA, II; NOTE ON MR. HUNTINGFORD'S PAPER. *By James Hornell.*

178 Owing to Mr. Huntingford's courtesy in affording me opportunity to read his paper before publication, I am able to append the following remarks upon what he has written. These, I hope, will help to clarify the position.

Three hypotheses are in the field regarding the origin of the fundamental characteristics of the Baganda boats of Victoria Nyanza. The first and oldest is that sponsored by Sir G. Elliot Smith and Mr. Huntingford, which attributes them to ancient Egyptian influence. The second is my own: this postulates Indonesian influence exerted at a much later date—probably contemporaneous with the settlement in Madagascar of the ancestors of the Mongoloid section of the population of that island. Lastly and latest of all is Dr. E. B. Worthington's belief that the design is an indigenous one, evolved locally by boat people of the lake in the sequence which he has depicted, leading upward, by definite stages, from a simple dugout to the big war-canoe first figured by H. M. Stanley.

Each of these hypotheses presents difficulties in its acceptance. These may be summarized as follows:—

I.—*Against an Ancient Egyptian origin:—*

1. The fact that every scrap of evidence that we possess of the boat-building methods of the Ancient Egyptians shows that their system of connecting the planks of the hull was by an elaborate form of pegging, with pegs in the form of broad dowels, reinforced by the use of wedge-ended or dovetail tenons on the inner side of the planking. In no case, so far as I know, is there any trace of 'sewing' through holes in the opposed edges of the planks.

To-day a modification of the same system of pegging survives in the *naggar* of the Nile: here iron nails, with the heads recessed on the outer side of the hull planking, pin together the rough planks and are without doubt the morphological equivalents of the broad wooden dowels of ancient times.

2. Bifid prows. In the first place I have to point out that Mr. Huntingford's figure 4 (after Wilkinson, ii, p. 167) considerably exaggerates the so-called bifid character of the prow as shown in the original drawing. In common with Wilkinson (ii, p. 128) I know of extremely few instances where there is an angular

incision under the extremity of the prow. Of the hundreds of boats which I have examined on the walls of Egyptian temples and tombs not half a dozen show any suggestion of the bifid character. So slight, however, is the notch that it is probably an ornamental feature and not structural. Wilkinson, I may add, states specifically (*l.c.*): "I have met with two boats only in which there was any resemblance to a beak." Even the warships of Ramessu III, represented so realistically on the walls of Medinet Habu, are without trace of such a feature, which surely would have been adopted had there been a free prolongation at the fore end of the keel plank in trading boats on the Nile. Sir Flinders Petrie in his many illustrations of 'Egyptian Shipping' (*Ancient Egypt and the East*, 1933) has no hint of any boat being furnished with a bifid stem. Among modern Egyptian boats there is never the slightest suggestion of such a feature.

II.—*Against Dr. Worthington's hypothesis of a purely local or indigenous origin*, the most weighty argument is the well-recognized lack of skill in boat construction shown by the Bantu and the Negro *unless and until they have received instruction from people of other races possessing such skill*. This, indeed, is the basis of my argument. I consider it most unlikely that Bantus on the shore of Victoria Nyanza would construct or evolve such well-designed boats unless they had been in contact with a people having boats of a closely related model, such as the Indonesians have, characterized by (a) bifid prows, (b) the outboard projection of the thwart ends, (c) the sewing together of the hull planking, and (d) the 'caulking' of the joints by means of battens inserted under the stitching on the inner side of the skin.

Of these characteristics the only one possessed by some ancient Egyptian boats is (b). All the others are absent!

III.—*Against my own hypothesis*.—The principal objections raised are (1) the absence of other signs of Indonesian influence in the Victoria Nyanza region and (2) the lack of any identity with the present-day coast boats of East Africa.

1. The first objection is not altogether valid. I have already adduced several instances of Indonesian types of musical instruments having penetrated inland into Tanganyika; and while

Tanganyika is not Kenya, it is so near that to reject evidence on this account is a mere geographical quibble. Other correlations may become possible when the geographical distribution of cultural features is better known than it is at present. African ethnologists have often little acquaintance with Indonesian culture through the habit, unfortunately so common, of working in watertight compartments. Further comparative study of the cultures of East Africa and Indonesia is urgent.

2. As to the second objection, here, too, the difficulty may not be so great as has been emphasized. The *mtepe* of the Lamu coast has the planks of the hull sewn together. This is one of the outstanding characteristics of the Victoria Nyanza boats. Also, as I have pointed out already, the *mtepe*'s crew have the same custom of ornamenting the prow with amuletic objects as the boatmen of the Lake.

That the Victoria Nyanza boats are without the outriggers of the coastal fishing craft is urged as a vital objection to my conclusions. This is by no means so serious as it would appear. The coasting boats and the fishing canoes of Sumatra are both without outriggers at the present day, as are almost all those in use in Java, except at the eastern end; in both localities double-outriggers were still flourishing in the days when Dampier sailed the Eastern seas (1688). If, then, the outrigger has disappeared throughout the greater part of one of its chief centres within the last two hundred years, need we wonder at

its absence from the Victoria Nyanza boats in view of the fact that the voyages of these boats are seldom if ever more than coasting trips performed within sight of land, where they are able to seek refuge if the weather become stormy? The use of an outrigger under such conditions means a needless expenditure of labour in its construction: as we know, the African native is averse to incur any but the barest minimum of effort unless there be unusual incentive or need.

As to the absence of bifid stems in any African coastal craft, it has to be remembered that even in Sumatra and Java at the present day there are only two local types of coastal vessels that possess prows of this design, although in the fishing canoes of the northern Celebes and the Philippines this is a common feature. Good examples of these are seen in text-figures 10 and 44, and plate figures IX, X, XIV and XVII, of my *Outrigger Canoes of Indonesia*.¹ All these show bifid prows more comparable to the Victoria Nyanza prow than that on plate XLI of No. 5 of Mr. Huntingford's bibliography. I have also seen in the Comoro Islands canoes with the prows suggestive of a bifid origin: these boats, in common with those of Boro Budur, have paired oculi both on the bows and on each side of the stern.

For other details see my paper, *The Baganda Canoe: the Problem of its Origin*, in the 'Mariners' Mirror,' xix, Oct. 1933.

¹ *Madras Fisheries Bulletin*, vol. xii, no. 2, 1920.

RED PAINTED POTTERY FROM COCHIN STATE.

179 In a recent excavation of an underground granite dolmen lying in Tiruvilwamala village, Cochin State, about eighteen miles due west of the Palghat Gap, I came across a fairly large number of red painted pottery sherds, one whole (though broken) bowl, and another bowl with a portion of its side missing. The dolmen excavated was a granite stone chamber sunk in the ground, and was roofed by a slab of stone which was resting on four upright stone slabs that formed the two sides and two ends. It was floored by two stone slabs kept together. The chamber was almost completely full of infiltrated mud. All the objects were found lying scattered on the floor of the chamber. Since ancient red-painted pottery is not, so far, a common find in this part of Malabar, a short note on

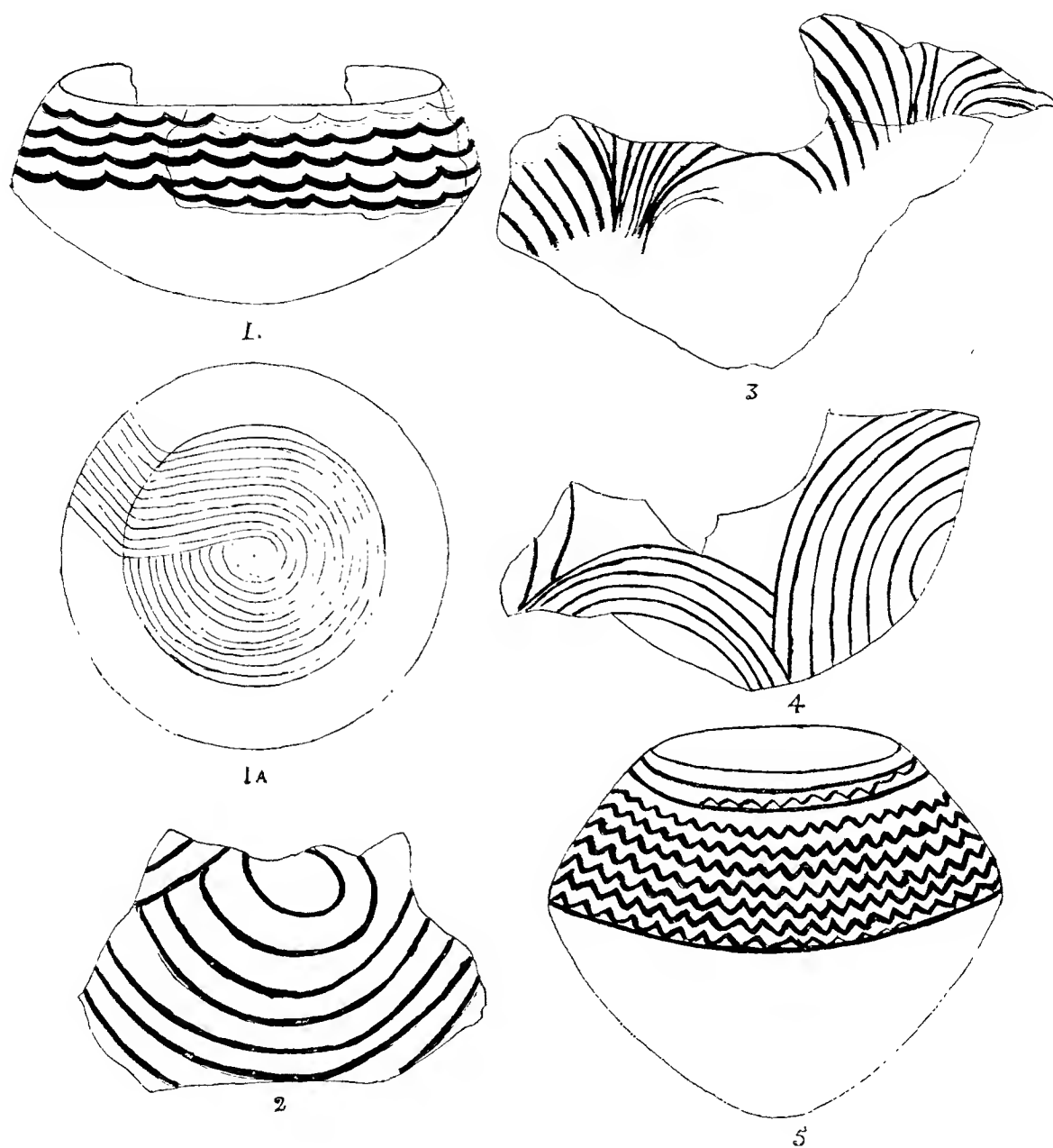
By K. Gorinda Menon, Madras. Illustrated.

these finds will be of interest. The finds are as follows:—

Bowl.—Wide mouthed, red coloured, well made, decorated inside and on the upper half outside. Height 3 inches, diameter 5·5 inches at the mouth. Painted red both inside and outside. The sides slope inwards from the bulge upwards. The decoration on the outside is in wavy, broad whitish lines resembling basketry work (Fig. 1) and inside is a loop coil of twelve strands, starting from the bottom centre of the bowl and terminating at the brim on one section of the side (Fig. 1A).

Bottom Sherd of a Flat Dish.—Red coloured. There is no decoration on the outside. The decoration inside seems to be a loop coil. Painted red both inside and outside (Fig. 2).

Bottom Sherd of a Round-based Thick Bowl.—



FIGS. 1-5. RED-PAINTED POTTERY FROM COCHIN STATE.

Painted black inside and red outside. It has decoration on the outside but none inside. The decoration appears to be of arcs, some thin and finely drawn (Fig. 3).

Bowl. Elongated. Conical-bottomed.—Red coloured unpainted rough surface inside, painted red outside with decorations on the upper half, well made and nicely shaped. Height 7 inches.

diameter 5.5 inches at the mouth. The sides slope inwards from the bulge upwards. Two parallel grooved lines run around the body below the brim and one around the body just below the bulge. The decorations lie between these three grooved lines. The decoration is close wavy, whitish lines suggesting imitation of basketry work (Fig. 5).

The decoration on all these objects is painted with some white material, probably white clay. They have a bright polish and look as if they are glazed.

Shoulder Sherd.—Buff coloured, unpainted rough surface inside and painted dull red outside. There is decoration on the outside of concentric arcs. The substance used for decoration appears to be the same as that of the sherd itself and hence this decoration does not stand out as brightly as the others (Fig. 4).

The method adopted in decorating and painting these pieces of pottery might have been as follows:—After the pot is made and when the clay is still wet the decorations are painted with some white substance. Then the pots are dried by some method other than baking (most probably by exposing them to the sun). When dried, a coating of paint is given and the pots are then fired evenly. The paint after firing takes on a high polish, and the vessels look as if they have been glazed.

The two bowls contained red hardened earth mixed with some ashy-coloured substance. Samples of this were chemically analysed by Mr. S. Paramasivan, of the Madras Government Museum, to find out whether there was bone ash

in it. None of the samples analysed showed the presence of bone ash.

The associated finds were a large number of black pot-sherds, one earthenware stand with a portion of its base missing, a large number of unpainted red pot-sherds and some highly corroded pieces of a broken bronze bowl. The pieces of the bronze bowl were chemically analysed by Mr. S. Paramasivan, and I am indebted to him for the report given below.

Analysis of the pieces of the Bronze Bowl.—"For purpose of analysis, only oxidised core was available. The metals in the oxidised state were determined and afterwards the metals that should have been present in the original alloy calculated. The calculated results are as follows:—Copper, 86.78 per cent.; Tin, 12.34 per cent.; Antimony, 0.49 per cent.; Iron, 0.36 per cent.; Lead, trace." Amongst the associated finds of this granite chamber no iron object of any description was found, nor did I find any bones.

I am obliged to Dr. R. Menon for the valuable help he rendered me in my excavation work, and to Sreemathi V. K. Ammukutty Amma for helping me with the sketches.

PROCEEDINGS OF SOCIETIES.

The Rhodes-Livingstone Institute of Central African Studies.

180 The year 1940 will mark not only the jubilee of the foundation of the two Rhodesias in 1890 by Cecil Rhodes, but also the centenary of the departure for Africa in 1840 of David Livingstone. It is proposed that this double anniversary should be commemorated in Northern Rhodesia by the establishment of a Rhodes-Livingstone Institute of Central African Studies which will serve as a combined memorial to these two famous men, in the fulfilment of whose ideals lies the best hope for the future of British Central Africa.

The Rhodes-Livingstone Institute is intended as a contribution to the scientific efforts now being made in various quarters to examine the effect upon native African society of the impact of European civilization, by the formation in Africa itself of a centre where the problem of establishing permanent and satisfactory relations between natives and non-natives—a problem of urgent importance where, as in Northern Rhodesia, mineral resources are being developed in the home of a primitive community—may form the subject of special study. The Institute will be situated at the town of Livingstone, the old capital of Northern Rhodesia, seven miles from the Victoria Falls of the River Zambesi, which forms the boundary

between Northern and Southern Rhodesia, where the Government of Northern Rhodesia, generously helped by the Beit Railway Trust, the Council of the Royal Geographical Society, the Scottish National Memorial at Blantyre, and a number of individual benefactors have already established a Museum which contains, in addition to objects of historical interest connected with David Livingstone, the nucleus of an important ethnological collection. This Museum is at present housed in what used to be the premises of the United Service Club, adjoining old Government House. It is proposed that these two buildings and the grounds in which they stand should be purchased and adapted to the purposes of the Institute at an estimated cost of £15,000 and vested in the Trust which has been formed by recent legislation in Northern Rhodesia for its general and financial control.

As a preliminary to the foundation of the Institute and the incorporation with it of the existing Museum, the Northern Rhodesian Government are appointing an expert in Applied Anthropology who will subsequently be provided with an assistant if funds are available. The annual cost of these two appointments is estimated at £1,225.

In this combined perpetuation of the two founders

of Northern Rhodesia the Government of the territory will bear its proper share, but the countless admirers of Rhodes and Livingstone throughout the empire, and also those who are interested in the welfare of the two communities with which their names are impensably connected will no doubt welcome an opportunity of contributing towards it. His Royal Highness the Duke of Kent, whose recent visit to Northern Rhodesia, and interest in the country and its people are remembered there with so much pleasure, has full sympathy with this appeal and wishes it every success.

We therefore appeal to all who are interested in Cecil Rhodes and David Livingstone and in the future of British Central Africa to show their

interest by subscribing to the capital cost of the Rhodes-Livingstone Institute or to the permanent endowment of the Trust, in order that the scheme may be in full operation by 1940. Cheques, which should be made payable to the Rhodes-Livingstone Trust, may be sent to any branch either of Barclays Bank Ltd. or of Barclays Bank (Dominions, Colonial and Overseas) or of the Standard Bank of South Africa, who have kindly agreed to receive them.

COSMO CANTUAR.	W. G. ORMSBY GORE.
WILLIAM EBOR.	TWEEDSMUIR.
DANIEL LAMONT.	LUGARD.
W. H. BRACC.	HAILEY.
HENRY BALFOUR.	H. J. STANLEY.
POLWORTH.	HAROLD B. KITTERMMASTER.
	HUBERT YOUNG.

REVIEWS.

ASIA

La Civilization Ainou. By Dr. George Montandon. Paris: Payot, 1937. 272 pp., 48 plates, 112 illustrations and 10 plans in the text. Price 40 fcs.

181 The Professor of Ethnology at the Ecole d'Anthropologie here fulfils his promise given in his earlier account of the physical anthropology of the Amus of Japan (*Au pays des Ainou*, 1919), of a study of Ainu culture and its relations to the rest of civilization. The present book is an important work and a good model for this type of treatise, the subject being dealt with in two parts. First come separate sections: tools, weapons, utensils; hunting; fishing; agriculture (this section is rather like Horrebow's famous chapter on snakes in Iceland); fire-making and metallurgy; dwellings and furniture; wicker-work, plaiting and weaving; transport (sledges, snowshoes, canoes); marriage, widowhood, divorce; social organization; pregnancy and birth rites; tattooing; games; funerals and burials; religion; art; music. The second part consists of brief summaries of the various Arctic cultures, from the Lapps in the west to the Eskimos in the east, followed by a study of the relationship of Ainu culture to these and to Indonesian, Amerindian and other cultures. Each part has a lengthy bibliographical list, in addition to which there is an index of 229 authors cited.

Montandon divides the white (Europoid) race into five branches: Nordic (blond); Alp-Armenian; Mediterranean (brown); Lapp; Amu. He says that the only Mongolian trait of the Amu is the prominence of the cheek-bones. But, surely, this characteristic is not confined to the yellow race. Thus the Amus, who numbered some 17,000 in 1920, are the remnants of a primitive white race which once inhabited the whole of Japan. About 15,000 live on the island of Yezo (Hokkaido), less than 1,500 on the southern extremity of Sakhalin, and the remainder in Shikotan (one of the Kuriles), whither they were removed from the rest of the Kurile archipelago by the Japanese in 1884. The Japanese invaded Yezo about 1500 A.D. but did not seriously colonize it until the 19th century. They now number some two million, but the Amus live apart in their own villages. An Ainu village was one of the attractions in the Jap-Anglo Exhibition at the White City about 1910 and the reviewer encountered 'hairy Ainus' in a London bus.

As in many other lands, there is a tradition of the former existence of a race of dwarfs, named *koropok-guru*,

meaning 'pit-dwellers.' The earlier Amus lived in the winter in semi-subterranean huts. As the spade has yielded no evidence of dwarfs, the tradition is probably partly psychological in origin, and may also refer to the earlier pit-dwelling Amus.

Blood-grouping has been done in Yezo by Ella Groves, Ninomiya and Nakajima, and in Sakhalin by Kishi and Dujarric; but the results are very puzzling and at present worthless, confirming Montandon's claim that blood-grouping is of little or no value in determining race. On the other hand the papillary ridges of the the fingers of Amus are distinctly of European and not Mongolian pattern.

The Ainu language is entirely agglutinating and cannot yet be assigned to relationship to any other known tongue. No earlier language than Ainu has left any trace in Japan. According to the Rev. John Batchelor, many geographical names between the Urals and the Pacific can be explained by the Ainu tongue. From this it appears that the Ainu tongue once covered a very large part of Asia.

In eastern Asia the palaeolithic age lasted until 1000 B.C. (The first purely palaeolithic station in Japan was not discovered until 1931.) Mongolian (Tungus) and Indonesian elements (neolithic culture) entered Japan, mainly from Korea, between 1000 and 500 B.C. and, with some Ainu admixture, formed the Japanese race. Neolithic cultures in eastern Asia are distinguished by three forms of celts. Celts with elliptical section are the oldest type, similar to those of central Europe, and are found in India, China, Japan, Eastern Indonesia and Melanesia. Shouldered celts come from Eastern India, Indochina, South China, Philippines, Formosa and Japan, and are assigned to the Mongolian race. Celts with square section are spread over both of the aforesaid areas but are specially concentrated in Western Indonesia (Malacca, Sumatra, Java), whence the two other forms of celt are absent. In Japan the three types have not yet been classified stratigraphically or chronologically; nor have they been equated with the pottery.

Ainu pottery consists of corded ware called *jomon*, divided into three types, of which the oldest is called *atsude*, thick, orange or red-brown, sometimes painted red, shaped like an inverted bell, with exuberant baroque. This type is found throughout the Far East, while the two other types, *usude* and *mitsu* (both derived from *atsude*) are confined to Japan. All three are associated with grotesque clay human figures or statuettes.

Nowadays all pottery and metal ware used by the Ainus are of Japanese make. But the Ainus still make and use wooden vessels, notably in connexion with ceremonial libations.

The Ainus hunt the bear by spear, knife, poisoned arrow and trap, the last being of three kinds: one lets fall a tree-trunk; another releases an arrow from a bow; the third is a pit covered with branches. Three sorts of traps are also used for catching fish: one being a cage whence there is no return; another releasing an obstruction to prevent return; the third requiring the presence of a watcher to note the entry of the fish and to block up the exit. A peculiar method is the use of a pack of dogs for hunting the fish. The harpoon used in fishing is double. The bow is simple, not the complex Mongolian bow, while the quiver is peculiar to the Ainus and consists of a flattened cylinder (with a hd) of bark, strengthened in the middle by binding on two wooden slats.

There is no rule as to exogamy or endogamy, but in practice a modified endogamy prevails owing to circumstances. Polygamy is fairly common, the wives living in separate establishments. Divorce is easy. Some evidence of matriarchy exists (the better position of women compared with neighbouring races; better care of the pregnant female; a bride is never purchased; husband usually resides with wife's family; maternal relations (especially uncle) of more importance than paternal; wife does not always take husband's name and never does so as a widow). Montandon considers Ainus show more evidence of the matriarchate than does any other Arctic culture. Tattooing is restricted to the women and is chiefly circum-oral, resembling moustaches, and is usually done on betrothal. The extensor aspect of the forearm is also tattooed. The patterns in this case are usually rectilinear, whereas the other forms of art among the Ainus show a preference for curvilinear designs, except where compelled by the material (e.g., in weaving) to be rectilinear. Montandon concludes that this tattooing is of Ainu origin and spread from them to other Arctic races.

A peculiar Ainu practice is 'paraperineal excision.' The mothers cut their babies' legs on the inner side where they join the trunk. They dress the wounds with mycelium taken from under tree-bark. As the men take no part in this operation it is thought that it can have no connexion with circumcision, subincision or similar rites.

When an Ainu dies, he is buried in his best clothes, but they are purposely torn. Other belongings, which he will require in the next world, are also broken. The idea is that they have to die before their spirits can be released to join his. A grave is dug and posts are fixed along its periphery, the whole being covered with mats. The body is hung on a special phallic post, while the grave is being dug, and is afterwards lowered into it, together with the broken goods. A mat is laid over the corpse and covered with wooden planks. Earth is then trampled down hard; but no tumulus is raised. At the foot of the tomb a phallic post is erected. Brushwood is used as a protection from animals. A dead virgin has buried with her a pair of men's trousers. (Perhaps marriages are made in the Ainu heaven.)

The Ainus are very religious but have neither priests nor temples. Certain sites are sacred: the hearth, the N.E. corner of the quadrangular hut (where sacred objects are kept) and the east window, through which to look in is taboo. The long axis of the hut is oriented to the sacred east. The entrance is usually in the south side, which contains a second window, through which it is presumably etiquette to look into the hut. The *inao* is a stick of wood on which lots of shavings have been raised all in one direction but not detached, so as

to form a tuft. The word *inao* means 'messenger' and is used to carry a message to God. The Ainu sets up his *inao* (making a new one if necessary) and says his prayer. The bear is also the object of a religious cult, which extended at one time throughout the Arctic, except for the Samoyedes and Eskimos. A young cub is caught and reared in a cage and on reaching full growth is ceremonially paraded, killed by crushing with a tree-trunk and ritually eaten after suitable apologies. If he were not killed his spirit would not be able to leave his body to carry the people's prayers to the God of the mountains. A good example of theophagy. Besides the bear there is a whole hierarchy of divine beings (*kamoui*) under a series of lesser gods (including the goddess of the hearth, a form of Vesta), all of them controlled by the Supreme Being, creator of all things. Apart from her share in the theophagy and prayers and offerings to her ancestors and her dead husband an Ainu woman can take no active part in religion. She cannot make an *inao*. The bear's head, very disguised, i.e., stylized (therefore ancient), is a common motif in Ainu art. The fish, also stylized, is another.

The following items appear peculiar to Ainus: wands for holding aside the whiskers while drinking ceremonially; a mobile fishing-hook; wristlets and anklets for the dead; quiver; weaving comb; snowshoes; 'moustache' tattoo; 'paraperineal excision'; certain art motifs. Elements characteristic of more northerly races include lack of navigation; architecture; bear-cult; destruction of property at burial; certain art motifs allied to Amerindian. Elements introduced from the south: cradle; T-shaped *cache-sexe*; club; poisoned arrow (the Ainus are the only northern race with this use); method of weaving; matriarchate; skulls crowned with pots; *inao*; jew's harp.

Montandon's scheme of primitive culture starts from a world-wide primordial culture which develops into two branches: early and late. The early branch (*rameau précoce*) spread over most of the world and was still established in the Oceano-Amerindian world at the time of the discovery of the New World in the 16th century. This branch developed two primary cultures: (1) patriarchal, totemic, hunting, ignorant of agriculture; (2) matriarchal, with marriage-classes, practising agriculture with the hoe. Other localized cultures evolved from the *rameau précoce*, which, however, extended to the Old World, where it was later overlain or wiped out by the later branch (*rameau tardif*), which was much more highly evolved than the *rameau précoce*. At the beginning of the *rameau tardif* are two patriarchal cultures: (1) pastoral, domesticating animals and occupying the more southerly zone; (2) arctic, in the northerly zone, a mixture of the world-wide primordial culture and the pastoral culture, acquiring in the process a stamp of its own. In analysing any arctic culture we must therefore discriminate between what belongs to the pastoral culture and what to the primordial. The pastoral culture, crossed with the two primary cultures of the *rameau précoce*, produced the higher civilizations whose flower is now our Western civilization.

The primitive arctic culture is represented by 40,000 Eskimos ('advanced primitive arctic'); 3,000 Kamshadales (now completely Russianized), 1,500 Yukaghir and 1,000 Gilyaks ('backward primitive arctic') and 17,000 Ainus ('degenerate primitive arctic'). By interaction with the pastoral culture the arctic culture produced the tarando-pastoral culture (*tarandus rangifer*: reindeer), represented by 30,000 Lapps, 25,000 Ostiaks, 18,000 Samoyedes, 200,000 Altai and 75,000 Tungus ('advanced tarando-pastoral') and 8,000 Koriaks and 12,000 Tchouktchi ('backward tarando-pastoral'). The position in Siberia is complicated by an intrusion

in the extreme north, surrounded by Samoyedes. Yukaghir and Tungus, of 250,000 Yakouts who are of

'arctic-pastoral' culture, breeding horses instead of reindeer. CANNING SUFFERN.

AMERICA.

The former Eskimo Settlements on Frederik VI's Coast. By *Therkel Mathiasen*. (*Meldteelser om Grønland, Bd. 109: Nr. 2.*) Copenhagen, 1936. Large 8vo. 55 pp., 28 figs. Price

One of the main objects of the sixth and seventh Thule Expeditions in 1931-3 was to study the former Eskimo settlements on Frederik VI's coast, that part of the East Greenland coast stretching from just north of Cape Farewell, in the south, up to the Angmagssalik district.

It is an inhospitable coast, now visited only by parties of Greenlanders from Angmagssalik hunting the bearded seal. When Graah was there in 1829 he found 536 inhabitants; but at about this time they were beginning to migrate to the West coast, attracted by the trading posts. The last native there accompanied Rasmussen in 1931.

The work of the survey consisted of reconnaissance (chiefly done by Rasmussen) and excavations, which were carried out by Erik Holtved and Mathiasen.

The earliest sites here are probably contemporaneous with the earliest in the Angmagssalik district (Mathiasen 1933). They date from the end of the fourteenth to the beginning of the fifteenth century. They are not rich in objects, but such as are found are of the Inugsak culture. Fifty-five houses of this date were seen. Mathiasen summarizes their character as "Small, round, dug down

" into the ground, with poorly-built walls, paved floor, " sunken passage and often a cooking extension: some- " times two or three of these houses are built together, " making the complex clover-leaf shaped (*see*) . . . " This form of house was continued in use till into the " middle of the seventeenth century "

There were 137 houses dating from the seventeenth to the eighteenth century. " By this time the houses are " distinctly four-sided, first small, of a construction " similar to the earlier ones, but with more solidly built " walls; later in the eighteenth century we have the " large common houses, which seem to have been intro- " duced by a migration from the West coast " The objects in these ruins give a good indication of the culture of the period. It is derived from the contemporary South-West Greenland culture, but bears its own stamp, seen particularly in its harpoon heads, bored wound paws, lashed-on barbs of fish-hooks, bow drill mouth-pieces of seal astralagus, and so on. By the nineteenth century the population of the coast was already decreasing, only 56 houses of that period are listed.

For descriptive purposes Mathiasen divides up the coast into eleven natural occupational districts. The main part of this report is taken up with the more or less detailed descriptions of sites excavated. The illustrations are useful. One feels that a map of the coast in question would have been a good addition. IAN COX.

GENERAL.

Origine des Instruments de Musique. By *André Schaeffner*. Paris, Payot, 1936. 406 pp. Price 50 fr.

Which was the first instrument? " Il n'en pas " été un," answers Closson. " Un rythme, on l'obtient " en frappant en cadence n'importe où avec n'importe " quoi." Without attempting to define 'a musical 'instrument,' M. Schaeffner goes a stage further than M. Closson, and emphasizes not the rhythmic origin, but the space in which the sounds reverberate, and the quality of the objects which produce them. From the human voice, deformed, enlarged, resonated by a half-open mouth and varied by striking the 'adam's ' apple,' it is only a step to finger-checking, hand-clapping, the playful collision of bodies, and so to the waving of castanets, rattles and cymbals—an extension of the rhythmic needs of the human make-up.

The most obvious difference between modern and primitive music is that of function: ours merely, or more usually, an emotional appendage, theirs an integral part of everyday existence, in which both instruments and music are wrapped up in ritual and in tribal life. Origins of many instruments can be traced in this way: drums from workaday pursuits such as gram-pounding, bells from cowbells, whistles from the hunt, to scare or attract birds. Many instruments, particularly those of metal, are embedded in ritual symbolism; others, and particularly the flute, which is almost invariably a man's instrument, have a special sexual significance.

M. Schaeffner, equipped with an impressive array of

evidence, treats each class of instruments exhaustively, and after a judicious examination of primitive polyphony, which he attributes in some part to the original natural differences in vocal timbre projected into later inventions, proceeds to discuss with vigour the merits of the evolutionary and diffusionist schools in the matter of musical instruments. He quotes with effect the case of the pagan Kirdi and the Moslem Foulbe who, though living in continual contact, keep to their own instruments and even scales, and suggests that more attention should be paid to non-borrowing than is often paid to borrowing, a line of thought which is sometimes neglected.

The book, which is produced by M. Schaeffner in his capacity as Director of the Department of Musical Ethnology in the Trocadéro Museum at Paris, is rounded off by a suggested classification for instruments based on the four categories: solid bodies vibrating, flexible and stretched, and instruments sounding through air vibrations. There is an imposing systematic bibliography which is in effect a select list of sources covering the entire ground of his thesis. Glancing through this, one misses several informative articles by Kirby on South African music, Torday's on the Congo, Wallaschek's *Primitive music*—a pioneer of its kind—and a useful collection of material on *Maori music with its Polynesian background* published as a supplement to the *Journal of the Polynesian Society* in 1932 and subsequent years. Much of importance is, however, included, and the work is illustrated by some excellent action-photographs.

DOUGLAS VARLEY.

CORRESPONDENCE.

The Stone-Age Cultures of Uganda. (*Cf.* MAN, 1937, 129.)

184 Sir.—Mr. O'Brien and I differ so profoundly on many important points that it almost seems we are applying identical names to dissimilar things: but

I must confess that I am at a disadvantage in that while Mr. O'Brien was given complete access to all my notes and collections—an accumulation of many years—I have seen neither his notes nor his collections. It is understood, however, that Mr. O'Brien is about to

publish a Memoir on his researches in Uganda, and in that volume he will, no doubt, set forth his evidence—obviously space forbids the attempt in MAN. Meanwhile, it would be unprofitable to occupy valuable space in this Journal with discussions under the above heading; but on two important points I wish to record agreement: (1) The Sangoan is almost certainly of N-horizon age, and (2) part of the 100' \pm terrace is Gamblian. This has seemed obvious ever since the separateness of N, as distinct from the M-N complex, was definitely demonstrated; but there, apparently, our agreement ends, for in my view the correlation stands thus: M = Oldoway 'Bed' 3 (which I regard, in large measure, as the reddened upper part of bed 2); N = Oldoway Bed IV (in part at least) while post N 100' \pm terrace deposits = Oldoway Gamblian.

E. J. WAYLAND.

Prehistoric Remains on Historic Sites of India and the Near East. (cf. MAN, 1935, 159.)

185 SIR,—Since the publication of MAN, 1935, 159, in which I maintained a high dating for certain terra-cottas from Sari-Dheri (N.W. Frontier Province of India)¹, I have been able to examine the site, and to verify that the archaic figurines in question lie buried in the lower part of the mound. A full report of these investigations will be found in *Iraq*, 1937. The opinion there maintained is shared by such authorities as Dr. Contenau and Dr. Coomaraswamy. Most stimulating also was to me the spontaneous comprehension of Sir Aurel Stein, who possesses first-hand knowledge both of the prehistoric Indo-Sumerian material and of the Gandarian remains. The great explorer had the kindness to write, from the scene of his actual labours in Persian Kurdistan: "It is very gratifying to know that the Peshawar district, the sites of which have yielded such abundant remains of Græco-Buddhist sculptures, etc., to archaeological research of the last seventy years or more, holds out promise of finds throwing light on far more ancient phases of civilization in the Indus region."

These encouragements have led me to scrutinize deeper this promising field, and I am now making ready

for publication a work whose main conclusions I shall briefly summarize here:—

(1) Sari-Dheri is not isolated. It forms part of a vast cultural cycle that will be met in the deeper layers of many sites of historical date. These archaic remains have already come to light incidentally in some places. I have documentation from six sites², foremost among which is Taxila, the rich Indo-Scythian and pre-Mauryan city of the Upper Indus Valley that we owe to the systematic diggings of Sir John Marshall. The archaic remains of these sites offer some hundred parallels to the proto-historic material of Near Asia, belonging mostly to the intermediary period of Susa in Mesopotamia (c. 3500 B.C., figs. 3-6).

(2) Most unexpected are the numerous analogies between these archaic Indian remains with regions so far off as pre-Hittite Asia Minor and the Early Minoan Ægean (figs. 9 and 10). These connexions are corroborated by the presence of an Indian bull among ancient terra-cottas from Anatolia (fig. 10); the humped bull, as was remarked in Mesopotamia some years ago, evidences cultural relations of some sort with India. I believe that a close study of those clues which lead us into Indo-European lands will shed light upon the Aryan question, and that the connexions postulated between Sari-Dheri and Anau III are bound to find links in the northern region of Afghanistan, the natural passage leading from Turkestan to India. This connexion with Anau is confirmed by Dr. Mackay's recent excavations at Chauhu-Daro (Sind), where he found at the Harappa level the pin terminating in a double-spiral, well known

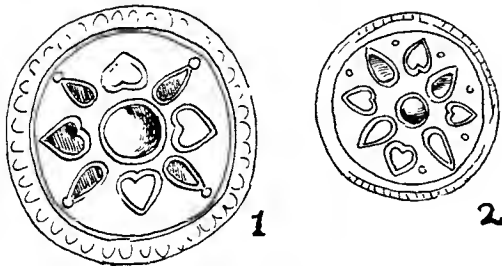


FIG. 1. CIRCULAR MEDALLION FROM TAXILA. (*A.B.I.A.*, 1928, Pl. III.)

FIG. 2. CIRCULAR MEDALLION FROM ARTJUKOW'S BARROW, SOUTH RUSSIA: II-III CENT. B.C. (Minns, *Scythians and Greeks*, p. 431.)

¹ The site of Sari-Dheri was discovered by Major D. H. Gordon, who dates it 200 B.C. to 200 A.D. (*J.R.A.I.*, 1932, pp. 163-171; MAN, 1934, 70; 1935, 129). Similar terra-cottas of Northern Indian provenance had been previously published by Dr. Coomaraswamy (*Ipek*, 1928, pp. 64-76), who, after a thorough analysis of the style, dated them to the Indo-Sumerian period.

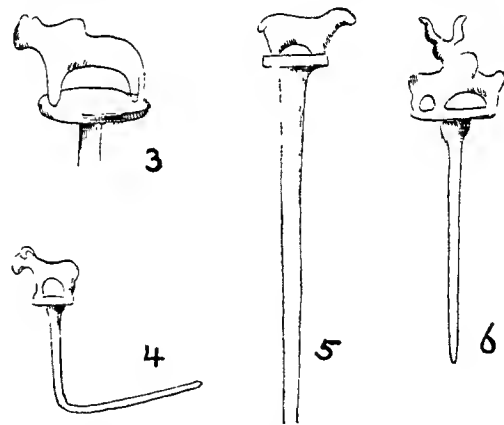


FIG. 3. TAXILA (*ASI.A.R.* 1924-5, Pl. XII, 1).

FIG. 4. EARLY CYCLADIC (*Eph. Arch.*, 1898, Pl. 8 (41)).

FIG. 5. KISH, TEMPLE MOUND (*Ashmolean Museum*).

FIG. 6. HARAPPA (*ASI.A.R.*, 1930-4, I, Pl. XXX, f. (4)).

at Anau, Troy, and the Cyclades (*Ill. London News*, 21 Nov., 1936, p. 909, fig. 9).

(3) At a more recent date contact still closer with Europe is disclosed by some finds in Northern India identical with those from the barrows of South Russia (figs. 1 and 2). Already a gold bracelet of pure Scytho-Sarmatian style, in the Peshawar Museum (*ASI.A.R.*, 1919-20, p. xxiv, c.), had been noted by Rostovtzev, who supposed it had come to India by trade. In fact, a whole stratum of Taxila bears the mark of Scythian

² Preliminary note in *Bulletin des Musées Royaux d'Art et d'Histoire*, 1936, pp. 42-46. The six sites are Charsadda, Shar-ji-ki-Dheri, Nagari, Bhita, Besnagar, and Taxila.

art. This site on which Sir John Marshall devoted so many years of his activities opens a new area in Eurasiatic archaeology. By Scythian is understood here (in the European sense of the term) the nomadic art that flourished in South Russia from the sixth to the second century B.C. and extended through Central Asia to China.

(4) Taxila appears to be of first importance also for the history of religions. No temples have been identified as yet in the chalcolithic cities of the Indus Valley, but Taxila gives us a miniature terra-cotta monument (fig. 7) which, if we analyze its elements, faithfully pictures the fertility-cult of the Mohenjo-Daro period. Cf. Sir John Marshall's chapter upon 'Religion' in *Mohenjo-Daro and the Indus Civilization*, vol. I. The Mother-Goddess, the 'linga,' the birds by the small cult-vessels associated with the serpents and the stepped ladder, find exact counter-parts in similar miniature shrines scattered all over proto-historic Near East: in Cyprus (Vounoi), Crete, Mesopotamia, etc. In the light of this votive monument I recognize as a shrine a small

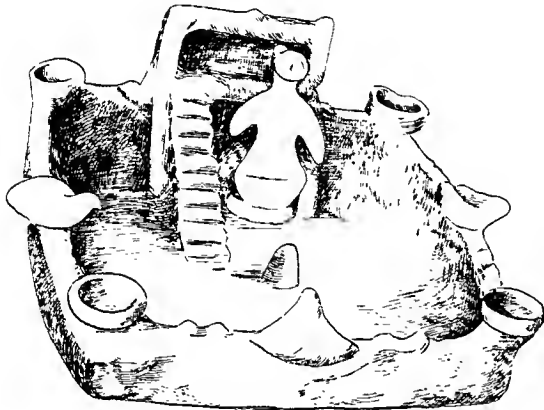


FIG. 7. TAXILA 'A' (*ASI.A.R.*, 1915-16, Pl. VIII, a).

building of Harappa that has escaped notice. It is the brick structure found by Ray Bahadur Daya Ram Sahni in 1924-25. It contains a stone 'linga' in the centre and stepped remains in front of the entrance. The discoverer himself stated: "It is not impossible" that the stone obelisk was presented or installed for "worship in this very cell," (*ASI.A.R.*, 1924-5, p. 78, pl. XXIV, e).

(5) A general conclusion emerges, which may provide the *terrain d'entente* between Major Gordon's views and mine. I refer to the inadequacy of the chronologies actually in use. Relative dating is at present fairly secure, and the synchronisms between the Indus and Sumer appear indubitable. But their absolute date leaves one more sceptical. As an attentive observer has noted: "Si un certain nombre d'indications tendent à faire remonter de plus en plus haut la date de la civilisation de Mohenjo-Daro, d'autres observations inclineraient à des conclusions contraires . . . La civilisation de l'Indus n'a donc peut-être pas une antiquité aussi haute qu'on a voulu le croire tout d'abord." (P. Stern, *L'Inde antique et la civilisation indienne*, p. 402.) We must bear in mind that there is still no general consensus upon the dating of the various civilizations of the Near East; that, according to the high or low chronology of one such country as Sumer, archaeologists differ by some 1,500 years; that the second millennium B.C. affords almost no monuments in Mesopotamia (Contenau in a

lecture at the Brussels University, winter, 1935); and that the same period on the Indus also remains sterile. To quote Major Gordon, (*MAN*, 1935, 129). "The gap in Indian archaeology that exists between the lowest date that has, as yet, been advanced for the Indus Valley culture and that of the Mauryan period, is a source of constant irritation." All these considerations make us feel the weak points of current

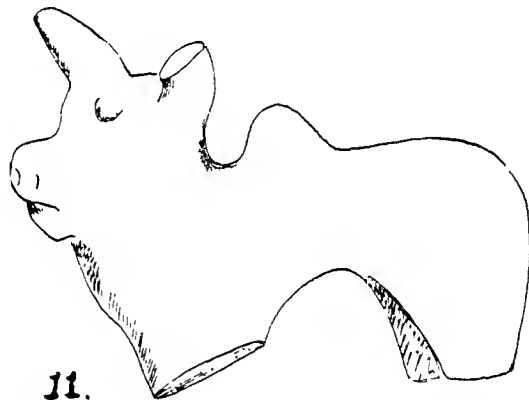
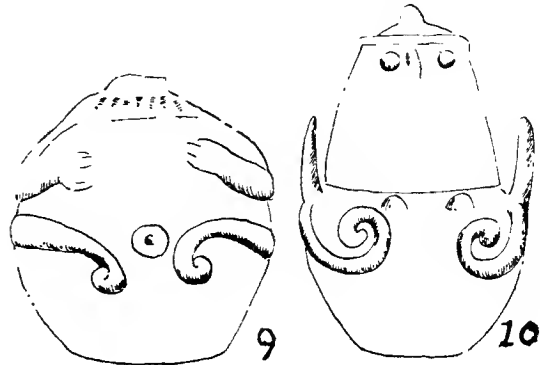


FIG. 9. BHITA (*ASI.A.R.*, 1911-12, Pl. XXII, 12).

FIG. 10. TROY II (Schliemann, *Ilios*, Fig. 185).

FIG. 11. ANATOLIA: TERRA-COTTA (de Genouillac, *Céramique Cappadocienne*, II, Pl. IV, fig. 4).

chronological schemes, and show the important bearing of stratified material from India, which appears linked to all the proto-historic periods. If there was a time when the Harappa culture had to rely upon Mesopotamia for its date, now it is the turn of India to enlighten the datings of the Near East. SIMONE CORBIAT.

P.S.—When the above was ready to print, appeared Major Gordon's latest study ('The Mother Goddess of Gandhara,' *Antiquity*, 1937, pp. 70-80). I can here only add a few remarks on it:—

The presence of coins of the Kushan period at Sari-Dheri does not invalidate the high dating of certain strata on the site; for, at Harappa also, coins of recent date were found—hundreds of coins belonging to the Indo-Scythian period (cf. Cunningham, *A.S.I.R.*, 1872-3, p. 108).

The Khafaje figurine bearing the characteristic eyes, applied and incised, of the Sari-Dheri terra-cottas is not

a unique parallel, that might be ascribed to mere coincidence. Examples are many in proto-historic cultures: at Mohenjo-Daro (Marshall, *Mohenjo-Daro*, iii, pl. CLIII, fig. 25; pl. XCV, fig. 15); at Kish (Mackay, *Antiquity*, 1931, p. 459, fig. 8); at Rakka (Mesopotamia, *Esa.* x, p. 92, fig. 16b); at pre-hellenic Argissa (Montelius, *la Grèce pré-classique*, p. 116, fig. 364a); whereas that peculiar technique disappears everywhere in Hellenistic times.

The anthropomorphic representation of the so-called Hariti and her consort (Major Gordon's, pl. I) cannot, I think, bear direct comparison with the archaic figurine of the Mother-Goddess and symbolical 'linga' from Taxila of the votive shrine (fig. 7). They differ as much as the Christian art of the Catacombs differs from the iconography of mediæval times: the idea illustrated may remain substantially the same, but its representation has evolved, and that implies a difference of time.

We read in the excavator's accurate report (Marshall, *ASIAR.*, 1924-25, p. 50) that the votive shrines were found alongside the base of the *stupa* and his plate shows them *in situ* (*ibid.*, pl. XIII, 2=fig. 8). If we consider the depth at which they lay, we may presume that they were buried beneath the stupa's occupation level. In my opinion the Buddhist shrine superseded, on the very spot, the cult-place of an earlier religion, that of the Mother-Goddess and 'linga,' which, evidently, have nothing to do with Buddha's creed.

Major Gordon's well-documented article brings new material of great interest. Such is the archaic figurine from Hadda (Afghanistan) (his pl. II, bottom right). The mound from which it comes, being reported to be a mile distance from the site where Monsieur Hackin's excavations have brought to light an admirable Buddhist culture, is bound to yield most valuable stratigraphical data.

S. C.

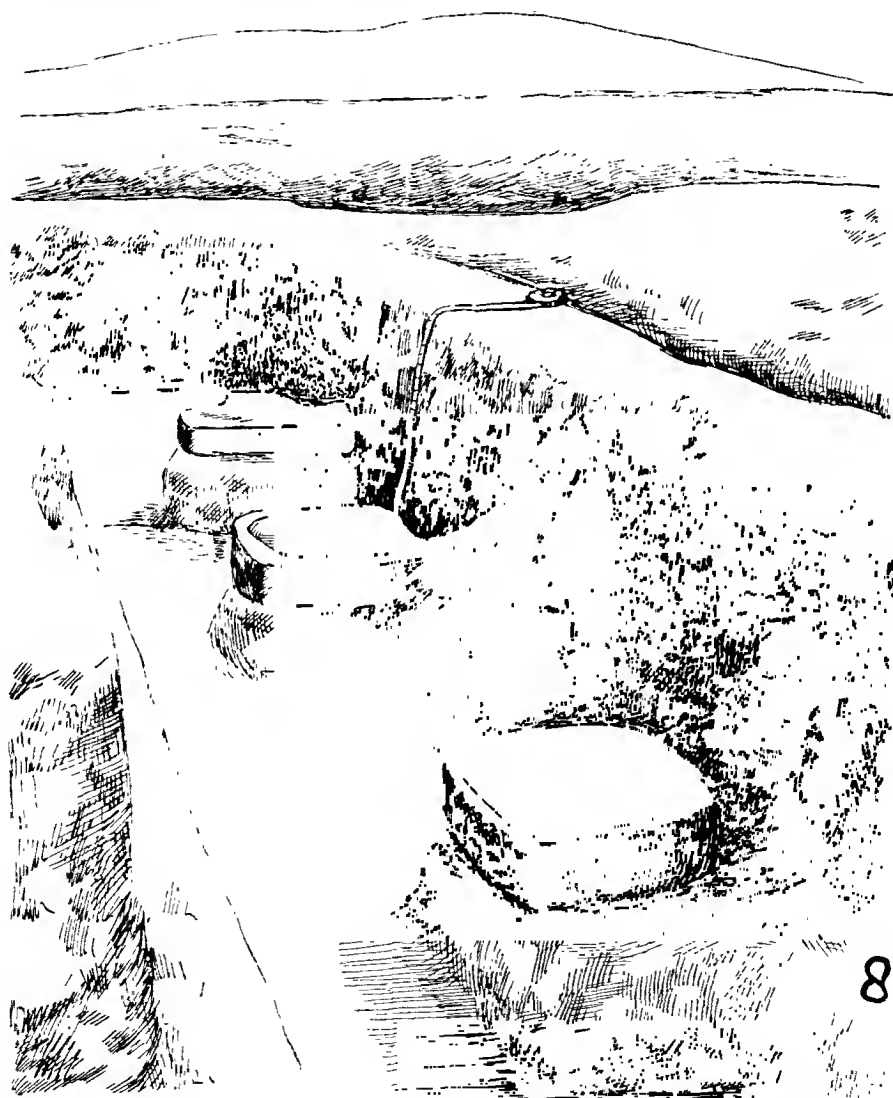


FIG. 8. TAXILA: VOTIVE SHRINES BELOW STUPA LEVEL. (*ASIAR.*, 1924-25, Pl. XII. 2).



THE SACRED MARRIAGE IN THE RITUAL OF OSIRIS: IN THE TEMPLE OF SETI I. AT ABYDOS

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 186-198

OCTOBER, 1937

ORIGINAL ARTICLES.

Egypt.

With Plate K.

Hornblower.

OSIRIS AND HIS RITES : I, with Plate K. By G. D. Hornblower, F.S.A.

ORIGINS AND CHARACTER.

186 Dr. Alan Gardiner has shown in *Journ. Egyptian Archaeology*, vol. II, pp. 121, ff., in his review of Frazer's *Adonis, Attis, Osiris*, that Osiris was always for the ancient Egyptians the dead king while Horus was the living one. As to the so-called 'resurrection' of Osiris, he says that it "was not that of a young and vigorous god of vegetation but that of a dead king, recalled " in the tomb to a semblance of his former life. The evidence for this is overwhelming." He concludes (pp. 125-6), referring to the Osirian rites commonly called 'mysteries' and the Festival of Khoiak which immediately followed them: "in the light in which I now see them they are " intimately connected in the first place with the death and burial of Osiris and the rising up of " Horus in his stead, in the second place with the kingship, and in the third place with the seasons " of the agricultural year. The development of a consecutive theory of Osiris must at this point " be left to others. May I be permitted to urge upon hieroglyph students the absolute necessity " for a careful collection of the *facts*, before such premature and daring theories are launched into " the world as some of those which Sir James Frazer, for want of sound information, has often been " compelled to use as a basis for his conclusions."

This indeed is a weighty warning, coming as it does from so sound and learned an authority, and it is not strange that, since it was written, Egyptologists have refrained, with rare exceptions, from publishing studies of Osiris based on Frazer's extension and development of Mannhardt's theory of the corn-spirit. Gardiner's review invites efforts to supplement his conclusions, with the caution that they should be founded on surviving inscriptions and monuments, and in this article I venture to submit an attempt.

To clear the ground, it must be understood that Egyptian religion does not consist of one connected logical system but is composed of a series of cults which have been roughly synthesized to fit, more or less harmoniously, into a general national system: the synthesis was most incomplete and led to endless contradictions and anomalies, some of them quite startling, as all Egyptologists know.

The cults involved may be briefly classified as follows: first that of a mother-goddess, arising from the mother-figure found, with her great broad hips, in the palæolithic age and widely spread in the Near East, in the neolithic and later times, as the Great Goddess, mistress of fertility and protectress of the dead. In Egypt she became Hathor and took a cow-form, as in Babylonia, which probably indicates an early relation to pastoral communities as well as agricultural: the name, which means the 'house' or 'seat' of Horus, connects her with the prehistoric Horus clan and we can probably see in it the first stage in the synthesizing process. Later, with the prevalence of the Osirian cult, Isis largely took her place, usurping even her cow-form (see my article in the *Journ. Eg., Archae.*, vol. XV, pp. 29, ff.—for Hathor, pp. 38, ff.).

The second cult was that of the Horus falcon from which the clan just mentioned took its name. The falcon was for it a kind of totemic head, and, indeed, a very early embodiment of godship, since the falcon on a perch was the first known hieroglyph to denote divinity: further, the head

of the clan was a living incarnation of the bird, which seemingly ranked as ancestral. The Horians had a successful career: starting from the Delta they accomplished, after many vicissitudes, the conquest of the whole country, bringing it, with the organized irrigation from the Nile with which they early became connected, to a state of prosperity so great and enduring that it remained proverbial for tens of centuries. The head of the clan now became the Pharaoh but still retained his position with regard to the falcon, with the name of 'the Living Horus.'

Meanwhile two other cults had arisen, the solar and the Osirian. The former does not concern us here further than to mention the results of the synthesizing process whereby the king became the son of the sun-god. Horus was identified with an aspect of the sun, 'on the horizon' (*Harmachis*), and Hathor and other divinities had various relationships with the sun attributed to them, such as his eye, face and so on, but with no great certainty of definition. Osiris was adopted into the solar circle as son of the Earth-god Geb and was included in the Ennead of the leading Heliopolitan deities, in spite of his former hostility of which faint but certain traces remain in the Pyramid Texts. The varying fortunes of the Horus-clan and the sun-cult are thoroughly discussed by K. Sethe in his 'Urgeschichte und älteste Religion der Ägypter' with great ingenuity which, however, in some instances, has been carried too far—one such instance was indicated in my review in *MAN*, 1934, 218. For the position of Osiris in the solar circle, see A. Rusch: 'Die Stellung des Osiris im theologischen System von Heliopolis'.

The Osirian, whose probable origin and history we have to discuss, was the cause of further synthesis, to make it work in harmony with its predecessors, with the result of still more anomalies. From all this mixture no clear logical system was evolved so that, when we speak of 'ancient Egyptian religion' we are really referring to the composite mass of religious practices observed by the ancient Egyptians. Such practices, as students are well aware, are fruitful sources of myths which, in their turn, have too often served as bases for accounts of Egyptian religion, the more mistaken that myths arise, and very easily, from various other sources, such as attempts to materialize ideas of the

immaterial. Some again are formed round actual events, while others are narrowly ætiological, designed by their explanation of names, principally topographical, to give them contact with deities or things of holiness: any attempts at elucidating myths must reckon with all these elements. One of the myth-maker's most ready instruments was the pun, relying for its efficacy on the belief that words themselves possessed a living force: this is most obvious in Egyptian literature, notably in its earliest manifestation, the magic-working Pyramid Texts; in them the pun prevails exceedingly, to the great confusion of modern interpreters.

In a lower plane of thought myth-making has always received great impetus from the need felt by manufacturers of spells to connect them with holy names: thus in Egypt a considerable number of narrative spells has survived, some incorporated even in royal tombs, such as the story of 'The Destruction of Mankind' which formed the introduction to an incantation against snakes and was inscribed in the tombs of Seti I and Rameses III; another outstanding example is inscribed on the famous Metternich stele and consists of a charm against scorpions. Myths of all kinds are liable to drop into popular currency, mostly with fanciful changes and additions, becoming often folk-tales: such are the story of encounters between Horus and Set recorded in the *Kahun Papyri*, edited by F. Ll. Griffiths, and others in the *Chester Beatty Papyri*, I, ch. 2, and III, edited by Alan Gardiner. These, again, have analogies in the tales of trickster heroes so well known to anthropologists and familiar to classical readers in the stories of the Odyssey and the Homeric Hymn to Hermes: comparison may even be made with the 'Infancy Tales' of the Christian Apocryphal Gospels. Now these were the stories known to the populace and through them to the Greek historians, who used them freely for their compilations, not having access to more authoritative sources; if therefore we use Greek writings for elucidating Egyptian religion, it must be as side-lights and not, as has been so often done, as central illumination.

The stratification of cults and the different qualities of myths have received rather insufficient recognition in Egyptian studies, but without some appreciation of them a solution of the problem posed by Gardiner can hardly be reached and that must be my apology for an introduction

which may have seemed rather beyond the subject in hand. A more detailed treatment may be seen in my series of articles in *Islamic Culture*, Vol. VI (part 4) and Vol. VII (parts 1-4); they do not include the discussion of Osiris.

If the classical writers can give us little guidance on the official national religion, they are very able to bring to light an aspect of importance which we cannot well discern in the monuments, that is the religious notions of the populace. It is quite clear that their regular religious pabulum was provided by the cult of Osiris and that he stood for them as the supreme pillar of their prosperity, not as a distant celestial being but as one who had trod the earth and undergone human adventures that they could understand. They identified him with the Nile-flood and even, according to some authors, imagined Isis as the fertile earth, embraced by him every year at the flood and thereby bringing forth their plenteous crops—thus she, like other great goddesses, such as the Indian Parvati, became Mother Earth and the action of the flood appeared as a kind of hierogamy, or sacred marriage. (See Plutarch *On Isis and Osiris*, sec. 38: for further references see the collection of classical writings made by Th. Hopfner in his *Fontes Religionis Aegyptiacae*, Bonn, 1922.)

The identification of Osiris with the Nile-waters was not of popular origin only, but formed part of the beliefs embedded in the official religion, as we may see from the hymns to Osiris: "Verily," it is written on the stele of Rameses IV at Abydos, "thou art the Nile, great upon the banks at the beginning of the season: man and gods live by the moisture which comes from thee" (see Erman's *Handbook of Egyptian Religion*, trans., p. 80). This passage takes only a small place in the hymn which, like all of its kind, is almost entirely dominated by ideas emanating from the solar cult which had become, at least from the beginning of the Fifth Dynasty, the basis of the official national religion: but its very position, amid such texts, shows its essential importance and, with other similar passages, it puts beyond a doubt the identification of Osiris with the Nile. And not with the Nile only but more specifically with the Nile-flood, for, just as 'the Nile' means to the mass of modern agricultural Egyptians the Nile-flood and not the actual river, which is simply called 'the river of Egypt' (*baḥr Miṣr*), so the 'waters' of the

Osirian hymns mean the inundation which causes fertility: the river indeed had its own god, Hapi, who held a subordinate place in the Egyptian Olympus, but he was always, as the hymns tell us, subject to the commands of Osiris. If in the oldest literature, the *Pyramid Texts*, the identity of Osiris with the flood is not actually declared, a very close connection is indicated, as in pars. 2111-3.

A further development was the identification of Osiris with corn and other crops, made clear in other texts—and very natural since vegetable life depended wholly on the Nile—a bald statement but needing no further enlargement as it has been fully dealt with by Budge, Frazer and others.

That Osiris was actually an ancient divine king who reigned in the Delta is now generally agreed among Egyptologists, but the reason of his identification with the Nile-flood has not been clearly explained though it may be quite simple, and, indeed, is very likely nothing more than that he was the originator of the general organized irrigation to which the country owed its extraordinary prosperity. Before his coming there had doubtless been small local efforts to improve the annual irrigation of the fields by trenching and banking to induce the flood-water to spread further or stay longer, that a greater depth of its rich fertilizing mud might be deposited; such efforts would be competitive and a fruitful source of strife between the various human settlements along the river, till at last a larger imagination and a stronger will conceived and brought into execution the new general system which should ensure, as nearly as possible, the regular irrigation of the whole of the cultivable area. And thus would Osiris show himself, godlike among men.

The success of such a system was not possible without strong central control which could only be established through a complete political unification of the country. This was achieved by the Horians, who appear to have joined early with the Osirians and then conquered Upper Egypt; a revolt in the Delta separated it from them for a time, but they re-conquered it and finally unified the country, partly by marriage, under the king or kings whose traditional name was Menes.

The great enemy of the Horians was the clan whose god and leader was Set and their centre at Ombos in Upper Egypt (modern Ballās). The

wars between them appear to have been bitter and they have left their traces in Egyptian myth and history through all times. Set becoming proverbially the ceaseless foe of Horus. Osiris was killed in these wars, or perhaps a successor who took the same royal name: the Horians fought on and eventually conquered; thus Horus, as the legend went, 'avenged his father Osiris.' In the beginning Set was a god in every way equal and similar to Horus, and his tribe, like that of Horus, was powerful, stimulated perhaps by contact with the culture of Mesopotamia through the Red Sea, for their capital was close to the head of the caravan route which led to that sea across the hilly eastern desert. That contact, under the Horians, is attested clearly by the Mesopotamian characteristics appearing in the artistic remains from Upper Egypt at the end of the predynastic period. So high was the original status of Set that when, in the process of cult-fusion he was taken into the Solar Olympus, it was in its loftiest circle, the Ennead of Heliopolis (*Pyr. T.*, par. 1655).

The Heliopolitans, followers of the advanced sun-cult, had also been a powerful people ruling a large district, and even once, as some authors think, the whole of the Delta and Middle Egypt.

This brief outline has followed, with some differences. Sethe's *Urgeschichte*: for Set see H. Kees' *Horus und Seth als Götterpaar* which, however, like the *Urgeschichte*, seems sometimes over-ingenious.

With the political union came again a further fusion of cults, a process repeated on all such occasions in early Egypt. In the Near East a conquering people which settled in the victims' land adopted its gods, as, for example, the Greeks and Romans did in Egypt: there was no question of fusion; but in Egypt all were of one race, though a composite one, and observed similar religious practices: each district had its own patron-god but recognized those of others as ranking with their own and forming together a divine family or brotherhood. Memphis, for example, had Ptah and Hermopolis (Ashmounein) Thoth, and when we see that these two gods had a high place in the theological system of the conquerors, we can be sure that their districts joined early with the latter, with little, if any, resistance. In fact it seems likely that, except from the followers of Set, resistance to the Horus-Osirian was slight and that the country was

probably as ripe for the new régime as it was much later, with very different reasons, for the change to Christianity: thus the unification of Lower and Middle Egypt would have taken little time, possibly a generation. In the end, while Horus remained the highest of all the tribal gods, incarnated in each Pharaoh, and upholder of the country's prosperity, each district retained its own deity as locally supreme. So marked was this feature that when a new capital was established, as at Thebes by the founders of the Eleventh Dynasty, the local god had to be accepted into the highest divine circle and was united with Rê, the Sun, under the name of Amûn-rê: even at Heliopolis, the centre of the cult of Rê, he had to be equated with the district god and there he became Tum-rê. Set alone was degraded and became patron-god of the desert, inimical to the cultivated land which was the special care of Horus: his name was also applied to the gods of foreign countries to the north which were all, at one time or another, dangerous to Egypt: yet he, too, had his followers, notably the kings of the Nineteenth Dynasty, some even taking the name of 'the man of Set' (*Seti*).

Osiris was adopted, as we have noticed, into the Solar circle, in spite of previous hostility. Much more than was his adoption by the Horians to be expected: in fact an even nearer relationship was found for he was accepted as father of Horus and, since the district gods were all originally of one brotherhood, he became, like Horus, the brother of Set and was made to share the bitter enmity existing between these two.

The picture outlined above of the forms and movement vaguely discernible in the mists of the prehistoric period cannot of course be put forward as definite, but it fits in with archaeological evidence and ethnographical analogies, and will be found to do so also with the myths and ceremonies which are now to be analyzed, and it is hoped that by combining the picture with the analysis an acceptable solution of the Osirian problem will be reached.

Plate K depicts the culminating scene of the great rite of the latter half of the month of Hathor which, in the Egyptian calendar, is the last of the four months of the Flood. It is sculptured in an inner chamber attached to the hall of Sukkur (*Sokaris*) in the temple of Seti I at Abydos: the other low-reliefs in the chamber show the king adoring various deities, but this is

the principal scene. It is inscribed "May Osiris " Unnefer (the Good Being) give to King Men- " maat-rè (Seti I) life and power (? joy)" and puts the king in special relation with the god since this moment was the supreme one in the adventures in myth of Osiris. At Denderah, it is part of a series of low-reliefs illustrating the secret esoteric part of the great rite and, with the priestly instructions concerning the latter, is carved on the walls of a chapel on the roof of the temple there. (See V. Loret's articles in the *Receuil des Travaux*, 1882-4 on 'Les Fêtes d'Osiris au mois de Khoiak'— 'Khoiak,' as Gardiner points out, should be 'Hathor'). Osiris is seen lying as a mummy in the 'House of Sukkur'—that is, the tomb, since Sukkur was the Memphian death-god. At his head is his sister-wife Isis, who is the Great Lady of Magic, and is here engaged in calling her dead husband back to life, temporarily, for the purpose revealed in the most important detail of her work. For Isis, whose name is inscribed beside her, hovers in the form of a falcon over the body of Osiris who, now resuscitated, is seen in the act of fecundating her: thus the rite reveals itself as the solemnizing of a Sacred Marriage.

A noteworthy figure is that of Horus standing protectively at the feet of Osiris; he is the old falcon-Horus, the now national god who was once tribal. A falcon also shelters the head of Osiris, as in the noble statue of King Khephren in the Cairo Museum; another is at his feet, and the falcon element is still more emphasized by the form taken by Isis. In the much later representations at Denderah, Nephthys, the sister of both, is depicted in one scene in place of Horus: she assists Isis in raising up Osiris, a co-operation mentioned in the earliest texts: in other scenes her place is taken by other gods. It may seem strange that Isis is doubly figured in the same scene, but the picture exemplifies in a small space a principle common in old representations of consecutive events, which often display them in one field.

This is undoubtedly the outstanding rite of the Egyptian year. Other sacred marriages are known: that of Amûn-rè in the 'Beautiful Festival of Opet,' at Thebes, and another of Horus with Hathor, at Edfou, are described by Blackman in *Myth and Ritual*, pp. 32, ff. These deities were, like Osiris, closely bound up with

the national life of the country, and it appears that a sacred marriage was a very early general institution, adapted to Osiris on the establishment of his cult—an inference strengthened by the texts which show that the Osirian festival was observed concurrently in various other Egyptian towns (see, for example, the hymns published by Budge in his book on Osiris, vol. II, ch. xvi: the names are given of several of the towns which rejoiced in the festival of the raising up of Osiris; besides these, there is much further evidence). The supreme importance of the phallus is very evident in the scene illustrated in the Plate, but has been modestly overlooked in various reproductions, beginning with Lanzone *Dizionario Mitologico*, pl. CCLXXVI. It is recognized in literature, for example, in the hymn to Osiris translated by Blackman from Erman *Literature of the Ancient Egyptians* (p. 304), in which the god is addressed as "Mummy with long member." It was taken up warmly—and very humanly—by the populace whose reaction to it is recorded by the classical writers, and round it many tales were woven (see Herodotus II. 48 and 60, for popular demonstrations corresponding, in a rude and rustic manner, with the phallegphoric doings reported by Plutarch, sec. 36, as connected with Osiris and instituted by Isis). On some such tales, whether of priestly or popular origin or a mixture of both, were probably founded the traditions about the treatment of the organ by Set and Isis, as reported by Plutarch. The question of dismemberment must be brought up later. For modern descendants of the sacred marriage and of the popular pranks, see MAX, 1927, 97 (p. 152).

To turn once more to literature: W. Pleyte has published in *Rec. de Travaux* (III, 58-64) a papyrus preserved in the British Museum forming part of a liturgical book and containing a hymn to the two divine sisters (Isis and Nephthys) in the temple of Osiris in the west. It is called 'The Hymn of the Mourners' but is, in fact, a frankly outspoken love-poem to "the beautiful youth": "Come at once to thy house . . . image of the fertilizer, lord of the pleasure of love at the entry of the womb . . . thou art a male for the two sisters . . . thy member is for us . . . thy son Horus is thy avenger, he binds the wicked one . . . O Lord of the East, our lord, bull fecundating the

" cows . . . the only vigorous youth whom it
 " is delicious to look at: man amongst women . . .
 " Ah, we see thee appear and the love in thine
 " eyes. I am thy sister Isis. the love of thy
 " heart. . . ."

Isis sang the song: she possessed the magic which should give her words power for action: it can scarcely be doubted that this hymn which is attributed to 'mourners'—a conventional epithet for the two sisters—is, in fact, a late version of the kind of magical incantation supposed to be sung by her to attain the consummation represented in our Plate. The *Pyramid Texts* are quite plain about the sacred marriage; par. 632 says, "Isis, thy sister, comes to thee rejoicing in thy love; thou placest her on thy member, thy seed mounts into her, &c." The passage is repeated in par. 1635 with the omission of one sentence.

A Y-SHAPED POINT IN NATAL, AND A BIG PALETTE FROM THE TRANSVAAL. *By the Abbé H. Breuil: illustrated.*

187 It is known that in South Africa certain pierced balls called *kwés* and palettes remind one of objects from the pre-dynastic civilisation of Egypt.

Amongst them. I have already mentioned in a previous article, those points (or knives) carefully trimmed to a Y-shape, well known as forming part of the funerary goods of pre-dynastic Egypt, but I have never given an illustration of them. To tell the truth, I had only seen one, in the collection my friend Miles Burkitt brought to Cambridge. It came from Estcourt, Natal, from a site with Smithfield industry (fairly old, I think) which yielded a good many points of our Proto-Solutrean type, trimmed on only one face like our planed leaf-tools. All the tools at Estcourt are of indurated schist, as is the one I present in Fig. 1.

As the accompanying drawing shows, the tool is trimmed in very flat long facets on both faces; it grows increasingly thicker as it approaches the point of the triangle in which it ends, and which is broken. The opposite end, on the contrary, grows thinner as it reaches the base of the triangle, which is hollowed by shorter trimming. The two faces are much alike. There is no doubt that this is a native replica of a well-known type of Egyptian object.

Amongst the palettes of schist which are fairly numerous in South Africa, and appear sometimes with the Smithfield, sometimes with the Wilton

The culminating rite described above was performed at the end of the whole ceremony and then, as the text tells us, Osiris was once more wrapped up as a mummy and taken back, his duty done, to his dark abode, there to rest another year—hence perhaps he was usually given the epithet of 'heart-weary,' not of 'dead.' The return was accompanied by the chanting of secret spells, in which a point of great interest is that the spells made there previously were thought still to retain their power, and had to be made innocuous by the new ones on each recurrence of the rite, so strong was the power believed to inhere in words.

To complete the Osirian picture there remain for consideration, besides the one or two points left over from above, the agricultural implications, the position of Isis, the *Sed* festival and some points in the actual text and the myths.

industries, the finest is certainly the one in the possession of the young son of General Smuts, which I illustrate in Fig. 2: it comes from Barber's

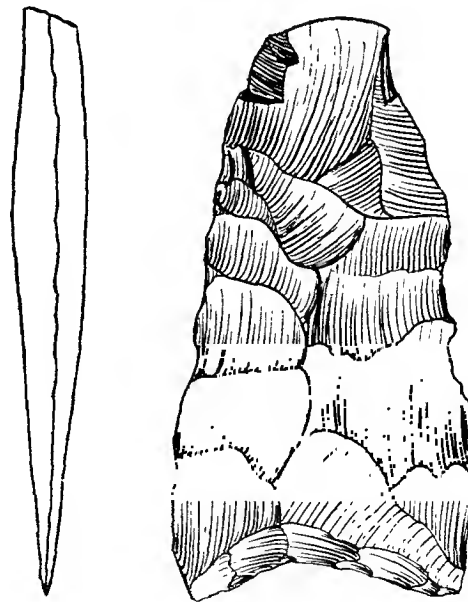


FIG. 1. A Y-SHAPED POINT FROM NATAL.

Pan, West Transvaal. I do not know what objects were with it, as it was picked up casually. Note the elliptical shape and the kind of bar in relief near the end, designed for holding it. Its appearance is completely Egyptian.

A LAKE VILLAGE IN WEST AFRICA. *By G. Rome Hall, M.D.*

188 The village in question was some five miles from the native town of Beyin in the Axim district of the Gold Coast: the eastern half of this region is in the forest zone, the western half is mostly swamp-land, lagoons existing in the rains for some miles behind the thirty-mile strip of beach, which is up to two miles wide. Beyin is over thirty miles from the

district capital, Axim; it stands on the shore and the lagoon is two miles behind it.

The writer as District Medical Officer visited it in August, 1896: a few months before, the District Commissioner, Dr. Charles O'Brien, (now dead) coming down from the frontier in a canoe, discovered this village: he was said to be the first white man to visit it, myself the second. If my memory is correct, Dr. O'Brien sent a photograph of this village to some home publication in the later part of 1895, or the early part of 1896.

A creek ran from the lagoon to a point half a mile from the town, which I reached in a dug-out canoe with several natives. Near the lagoon there was a dense fringe of oil palms and other trees: before that there was only swampland grass. This was so because in the rains the whole extent of land was flooded from the lagoon to near the town: the rise was apparently not more than three feet. Stick-fences, the openings of which only allowed of very small fish escaping, were pushed out seaward either side of the creek from near its entrance into the lagoon, for some hundreds of yards, converging ultimately to the seaward end of the creek. When this area was in flood, the fish came in. At the proper time, the town fishing-festival, their retreat was cut off by a special fence at the creek mouth. As the waters flowed out the fish could not reach the lagoon, and were easily caught in water at the most three feet deep. In the more advanced tribes this fishing-festival was a great affair. The presiding spirit of the lagoon was first given eight days' rest by the fishermen. On the eighth day the fishermen lined the water edge, with their throwing nets ready. The priest of the fishermen's company first blessed the waters and then threw his net. This was the signal for all to do the same. A similar festival is still kept up in at least one east coast town in England.

When I entered the lagoon, there was nothing to be seen of man's existence: there was a dark line of swamp-land palms a mile to the north, straight across, the lagoon curved somewhat to the east and west, with the same fringe of dark green. As I went towards the west, a small promontory came into view: when it was passed another was seen about a mile away with two lightish spots in front. These were soon seen to be huts built over the water, but they were not

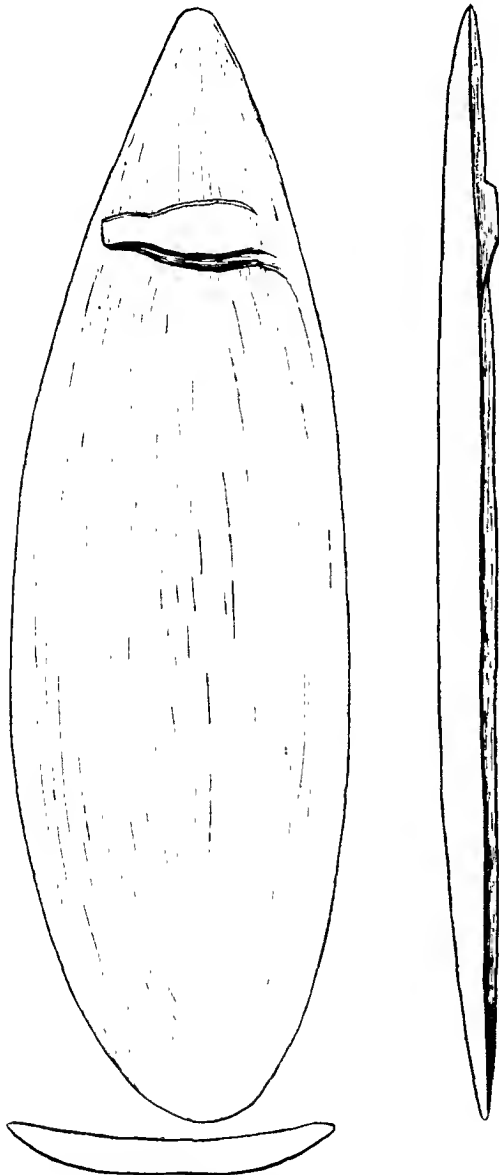


FIG. 2. A SCHIST PALETTE FROM BARBER'S PAN, WEST TRANSVAAL.

visited because the main village came into view about half a mile behind the promontory.

This was about a hundred yards from the shore, composed of three groups of houses, joined by stick-causeways. I understood that this disposition was made so that if one group took fire the others were protected by removing the causeway. The platforms were then about five feet from the water: they would only be two when the lagoon was full. The chief and his council of elders came to the village square. On the platform in front of his hut the usual three palm-trunks were laid, on three sides of a square, as seats. The chief was a dwarfish man, but decidedly alert: bamboo wine was produced, very much like whey.

I asked the chief how his people came to be living in a lake-village when none other was known on the coast; nor were there then any records showing present-day lake-village civilization in Africa in the sense that the settlement at Glastonbury, in tidal water, was a 'lake-village.'

The answer was that his ancestors had been fighting the Ashantis, who threatened to destroy them completely. The clan had fled towards the sea, which was a hundred miles away, until they reached Beyin. The chief here said he could not give them land to settle on, as he had a treaty of friendship with the Ashantis: but they could settle on water. This they had done, having now about thirty houses and a population of about two hundred. For plantations and for a cemetery they leased land on the mainland. This trek was probably two hundred years ago.

The platforms were composed of tree trunks from three to six inches in diameter. The piles on which these were laid were as much as a foot in diameter. There was no attempt to square the timber, and the water could be seen through the platforms, the platform-beams being only approximately parallel. The huts were built with

uprights lashed to the piles, generally with palm-leaf thatch, both for roofs and sides. The people had evidently come from a round-hut civilization: they had found this type impossible of reproduction on platforms, but had kept it in the build of the fetish-hut as far as they could: for this was octagonal, the nearest they could achieve to the round hut. In England we have still several round churches.

Children were playing on the platforms. As there were no railings, I asked if they ever were drowned and was told this very rarely happened after they understood speech: they were told they would die if they got into the water and they learned to avoid doing so. Although our children at home are hemmed in by glass, they soon acquire the habit of not breaking it.

I asked how the platform piles were driven in. In this stage there is only hand labour. It was explained that a pile was always a trunk of suitable size with, at the upper end, a fork of two branches cut off very close. When a pile was prepared it was taken to the spot where it was wanted by three men in a canoe: the lower end was placed where it was required. One man sitting in the middle of the canoe seized it at the top, bracing himself in the vessel. The others sat one at each end of the canoe, and paddled hard for a few strokes, then back again: by this swinging action the pile was driven in as far as was needed.

The fireplaces were hearths of dried clay, like the fireplaces in the bows of river-boats in the East. Primitive people cut hard timber by charring wood first; their weak tools of native iron can then chip it away. I have seen trunks of two feet diameter eaten through thus, in thirty inches of the length.

Before the days of European tools the canoes were for the greater part burned out, the charred wood being howked out with native adzes.

MARRIAGE-CLASSES AMONG THE CHIRUS OF ASSAM. By J. K. Bose, M.A. *Department of Anthropology, Calcutta University.*

189 The Chirus are a patrilineal people linguistically classed as a branch of the Old Kukis¹, inhabiting the hilly regions in the south-western portion of the Meithei State. According to the last Census Report² their total population

is 1,272 of which 564 are males and 708 are females.

In the opinion of Col. McCulloch³ the Chirus are a link between the Nagas and the Kukis. Dr. Brown⁴ regarded them as a branch of the

¹ Grierson, G. A.—*Linguistic Survey of India*. Vol. I, Part I, Calcutta, 1903, p. 73.

² Mullan, C. S.—*Census of India (Assam)*, 1931, Part II, tables, p. 262.

³ McCulloch, Major W.—*Account of the valley of Manipore*, Calcutta, 1859, p. 65.

⁴ Brown, Dr. R.—*Selections from the Records of the Government of India*, Calcutta, 1870, p. 135.

Kukis. Mr. Hodson⁵ represented them as a Naga tribe; but Col. Shakespear⁶ made no mistake in classing them as a distinct branch of the Old Kukis. In the last Census Report of Assam Mr. C. S. Mullan⁷ in a short note has contended that the Chirus are definitely a Naga tribe. But he does not put forward any fresh data to prove his statements; so his conclusions must be taken with reserve. With these conflicting opinions of different authorities at our disposal, we have made a survey of the tribe in detail and collected fresh informations on the different aspects of their life.

From the results of this investigation we can safely place them under the Old Kuki group. Their manners, customs, language and tradition are definitely of Kuki origin, but the characteristics which have misled some of the earlier authorities are their well-built bodies, hardy habits, cropped hair with head-band and the bachelor's house which all at first sight seem to be of Naga origin.

The Chims are divided into five exogamous groups or clans—Danla, Rezar, Chongdur, Shampar and Dingthoi. Of these the position of the Danla clan is superior to the rest of the group. This clan is also known as the royal clan and generally the headman of the village comes from this group. But now-a-days this rule has been slackened and any man of position can hold this post. Next in importance is the Rezar clan from which the assistant headman is generally chosen. All other clans are on the same footing. These clans have splitted into a number of family-groups. The formation of a family-group is a very simple affair among these people and a new one can be started only with the permission of the elders of the group. An instance of forming a new family-group will be cited here.

In the course of our investigations as we were drawing a genealogical table of a member of *Dingthoi* clan, he informed us that he did not belong to any of the family-groups of that clan. But when the names of his sons were recorded he told us that they belonged to *Sukh reng* family-group of *Dingthoi* clan. We enquired about the difference in detail and found out that four of the

sons of that person died previously after their birth, and on the fifth occasion when his wife became pregnant he consulted the priest who advised him to place the newborn child to a new family-group of the clan. This time a son was also born unto him and the child was named *Sukh reng*. The man now according to the advice of the priest started a new subdivision with the name of the newborn child, and afterwards all subsequent children were grouped in that family-group. This family-group is known as *Dingthoi-Sukh reng*. The reason for starting this family-group was only to avoid the misfortune which had fallen on his previous children. The idea is that by changing the name of the family-group they can escape the eyes of the evil spirits who bring this misfortune. Though new family-groups are frequently added to the clan, the clan tradition is never lost and at the time of marriage the clan is always taken into account.

Though the clans are exogamous a man or a woman cannot marry into any of the other groups. Their choice is limited by social convention and they have to abide by it. In every case a man's preferential mate is his mother's brother's daughter, and in her absence he can marry a girl of the same clan. The marriage with the daughter of the father's sister is totally forbidden. According to Col. Shakespear the marriage rule is—

A Danla lad may marry a *Dingthoi* or *Shangpa* girl.

A *Dingthoi* lad may marry a *Chongdur* or *Danla* girl.

A *Rezar* lad may marry a *Danla* girl.

A *Shangpa* lad may marry a *Dingthoi* or *Danla* girl.

A *Chongdur* lad may marry a *Danla* girl.⁸

Col. Shakespear's table seems to be incomplete, but it has suggested that there is a sort of marriage-classes among the people. With this idea we have made a detailed survey of the social organization of the people: but difficulty arises as soon as data from different villages were collected. The facts supplied by one village never tally with the informations of the other. Even the members of the same village do not agree with one another as to their social regulations. Moreover, the marriage regulations supplied by them have no similarity with the actual marriages in the genealogical tables. With these conflicting opinions we are faced with great difficulty in

⁵ Hodson, T. C.—*The Naga Tribes of Manipur*. London, 1911, p. 2.

⁶ Shakespear, Lt. Col. J.—*The Lushei-Kuki Clans*, London, 1912, p. 149.

⁷ Mullan, C. S.—Op. cit. p. 259.

⁸ Shakespear, Lt. Col. J.—Op. cit. p. 154.

coming to any conclusion. The only way left to us is to record the actual marriages of all persons of a particular village and to find out the system which is in vogue among them.

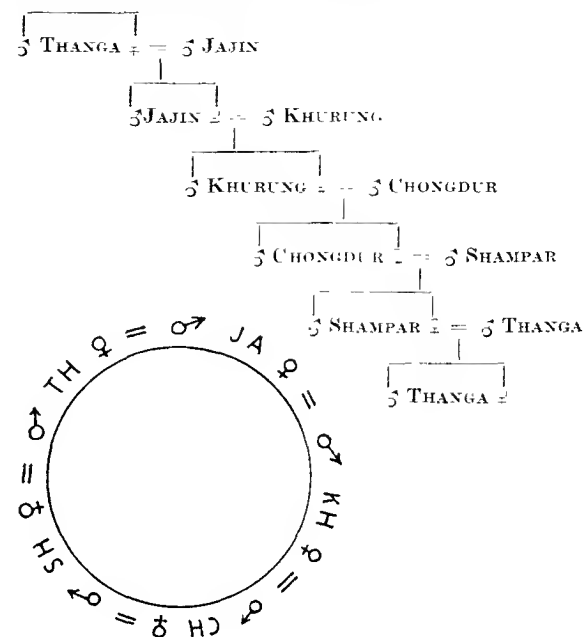
With this idea we select 'Nungsha Village' for our purpose which is situated near Bishnupore Bazar. This is a flourishing village with thirty families. Meithei influence is to be marked in the material culture of the people. Still they are more conservative in their social regulation than other villages⁹ of the people. Of the thirty families, ten belong to Khurung, six to Danla, five to Shampar, four to Chongdur and five to Rezar. In this village the people regard the *Khurung* as one of their clans but the men of other villages object to this statement. In our opinion, too, *Khurung* was formerly a family-group of one of the traditional clans, but with the increase of wealth and strength of the group they formed themselves into a distinct unit within the village. The largest number of families of this group in this village helps them to assert their right and they control the affairs of the village. The extinction of Dingthoi clan in this village may also make it possible for them to ascend to the position of that clan.

From the actual marriages of the people of 'Nungsha' village the following regulation is gathered :—

- A Jajin¹¹ (Rezar) lad marries a Thanga or Tobung (Danla) girl.
- A Thanga or Tobung (Danla) lad marries a Partak (Shampar) girl.
- A Partak (Shampar) lad marries a Rakha (Chongdur) girl.
- A Rakha (Chongdur) lad marries a Khurung girl.
- A Khurung lad marries a Jajin (Rezar) girl.

From the above data we shall construct tables to show that a cyclic system with five clans is still in vogue amongst them. But the strict observance of the early convention is undergoing considerable changes as they are coming into contact with the peoples of higher culture and are imitating the manners and customs of these people. Their hardy habit and well-built bodies have attracted the State authorities, and they are occasionally called for labour-work, and by this way they earn much more than by their own way. This easy money tends them more and more

towards the Meitheis, and they have recently started a village near Imphal, the capital of the Meithei State, to keep in touch with the State authorities. This contact with the higher culture will change the whole outlook of the people, and they will in near future become a hybrid race like the Kabui villages¹¹ near Imphal.



THE following abbreviations are used :—Th—Thanga, J—Jajin, Kh—Khurung, Ch—Chongdur, Sh—Shampar, ♂ indicates male, ♀ indicates female, = indicates marriage.

In the above tables we find that in each generation the girls shift from one group to the other, and after five generations they return to their original group completing the cycle of five clans. In the case of a Rezar girl, she marries a lad of Danla, her daughter a Shampar, her daughter a Chongdur, her daughter again a Khurung and her daughter again a Rezar lad. By this way the cycle is complete. But in the case of males they always stay in their own group. This circumstance is the result of following the a symmetrical¹² type of descent. The males follow only the patrilineal descent and avoid the father's clan in marriage, but the women avoid both the father's and the mother's clan and marry into a different group.

⁹ In Cheroi-Khulen village the villagers do not even observe the traditional rule of exogamy and several endogamous marriages were recorded amongst them.

¹⁰ In all these cases names of the family-groups are used, and in the enclosed brackets the clans with which the family-groups are associated are given.

¹¹ Bose, J. K.—*Notes on the Kabuis of Manipur*, Current Science, June, 1933.

¹² Seligman, B. Z.—*Asymmetry in Descent*, J.R.A.I. LVIII, p. 536.

PROCEEDINGS OF SOCIETIES.

Anthropology at the British Association, Nottingham. 1-8 September, 1937.

190 The Anthropological Section met under the presidency of Dr. J. H. Hutton, C.I.E. His address, *Assam Crigius in relation to Oceania* discussed the complex of very difficult problems presented by Indonesian migrations. Parallels between Assam and Indonesia, technological, linguistic, and religious, already noted since 1880, suggest that more precise comparison between particular groups of communities may supply more cogent proof of cultural relationship. This is offered here between Assam—especially the Angami tribe in the Naga Hills—and Fiji, the Marquesas, and Madagascar. In Fiji and in Madagascar, and probably also in the Marquesas this identity of culture, so far as it exists, is not that of a single culture, but rather of a complex of cultures in each case. In Assam, the stratification of these cultures can be traced in folk memory and recent tribal movements, since the fourteenth century, A.D. The Khasi migration came from the east, and is coeval with parallel culture in Tonkin about the beginning of our era. On the other hand, legends and customs of Naga Hill-tribes indicate former acquaintance with the sea; the so-called 'canoe-gongs' are a good instance, real canoes being used as gongs in Malaya, in Borneo and in Papua. If there was an Indonesian migration northwards into Assam before the Kuki tribes came south, it must have been before our era, and before the spread of the megalithic civilization of south-east Asia. The stratified cultures of Oceania must now be examined for traces of (1) an Oceanic canoe-culture; (2) a matriarchal megalithic culture; (3) a patrilineal culture associated with the Kayan and Kuki. But the immediate conclusion is that one of the migrations of culture, from a centre in or near the Indian Archipelago, terminated in Assam.

Papers were read as follows, and are noted in order of subjects:—

Physical Anthropology.—Dr. G. M. Morant summarized the descriptive material for the *Anglo-Saxon Population of England*, including the results of Dr. Munter's recent study of crania, and discussed the constants for sub-groups of the total sample, sex comparisons, and regional variabilities. The distinction between Anglo-Saxon and all later English populations is confirmed: the nearest Continental counterpart is that one of the Anglo-Saxon type is supplied by the Row-Grave people.

Prof. W. W. Jervis and W. S. J. Jones, in an *Anthropometric Survey of Somerset*, studied 400 adults from 73 villages, and separated by graph-analysis the principal ingredients of the population.

Mr. J. C. Trevor illustrated *Some Anthropological characteristics of populations derived from the crossing of distinct ethnic groups*. For characters which clearly distinguish the parent populations the averages in the derivation populations are intermediate. There is nearly perfect blending of average values, determined by the proportions of

the parental mixture. Though these observations traverse some genetical conclusions, they permit classification of races based on these criteria. The variabilities of crossed groups are (in general) no greater than those of the parent populations, and there is no hint that the distribution of metrical characters is other than normal.

Miss M. L. Tildesley summarized proposals for *Standardization of Technique* in anthropometry.

A Report was presented on the *Blood Grouping of Primitive Peoples* in Assam, India, Canada (Eskimo and Micmac) and China.

Prehistoric Archaeology.—Mr. A. L. Armstrong reviewed *Palaeolithic Man in Nottinghamshire*: disregarding eoliths, the earliest remains are Acheulian from the Trent's 'second terrace,' near Beeston. The Cresswell Caves have Mousterian and Upper Palaeolithic deposits; and recent finds at Whalley and Cresswell suggest continuous occupation till early Mesolithic times.

A Report on *Kent's Cavern* recorded recent work in the 'vestibule' and the discovery of Levallois and Aurignacian implements.

Messrs. H. J. H. Drummond and T. T. Paterson reported *Recent Palaeolithic Fisheries in India*, from the Soan Basin (Punjab), from Rohri and Sukkur (Sind), probably contemporary with the earliest Mohenjo-daro civilization, and from sites in Madras, Acheulian with South African affinities.

Mr. J. G. D. Clark's *New discoveries relating to the earliest settlements of Northern Europe* dealt mainly with refinements of method which have (1) recovered objects of perishable materials, as well as stone tools, (2) determined climatic and vegetational conditions, and (3) proved the succession of cultures, by superposition and correlation with natural events.

Miss Eleanor Hardy connected *Pollen analysis and Archeology*, through the evidence supplied by plant remains for changes of climate. The copious Swedish evidence needs to be supplemented from Britain, where many peat-deposits have been destroyed.

Mrs. E. M. Clifford's *Types of Long Barrows on the Cotswolds* include three 'double-cruciform' examples: one has a 'horned' entrance and central cupola; all are formed of upright stones and dry-walling, and have external revetment-walls. The contents include dolichocephalic skulls, Neolithic 'A' ware and 'B' beads, and bone tools.

Miss C. A. Simpson discussed the *Trackways* along which long-barrows occur.

Mr. Saintey described a *Long Mound at West Rudham, Norfolk* of pre-late Bronze Age.

Mr. J. N. L. Myres reviewed the *Ceramic evidence for the Anglo-Saxon Conquest*. The Continental connexions of the English pottery (mainly from cemeteries) are with the Anglo-Saxon, Frisian and Rhinish districts, and more complicated than Bede's account of the invasion suggests. The finds illustrate burial customs, social habits, relations between areas, and between invaders and surviving natives. Of special significance are the stamped ornaments.

Mr. Kenneth Jackson discussed *The Anglo-Saxon Invasion in the light of early Welsh poetry*. The early Gododdin poem, of the late sixth century, gives contemporary account of wars between the Britons round Edinburgh and Northumbrian Angles.

Prof. V. Gordon Childe and Mr. W. Thornycroft described their *Experimental production of phenomena distinctive of Vitrified Forts*. A model 'Gallie wall' of stone, brick and timber was vitrified by burning timber heaped against both faces, faithfully reproducing the condition of ancient forts in Gaul and Scotland.

Similar results were obtained from an ancient fort, unvitrified.

A Report on *Mining Sites in Wales* described ancient workings with use of stone hammers, which may be of Roman date.

Miss Margaret Murray described her *Excavations at Petra* in North Arabia.

Folklore.—MM. A. Varignac and G. Rivier, surveying the study of *Folklore in France*, proposed the establishment of an International Committee of Folklore Methodology, to classify folklore facts and to establish a standard index for folklore bibliography, the series of facts to be noted on every national folklore atlas, and a code for the elaboration of folklore maps.

Lady Raglan's paper on *The Green Man in church architecture* identified with a well-known folklore personage a large number of representations on painted glass, stone bosses, and in other decorative positions.

Prof. S. H. Hooke discussed the fratricide motive in the story of *Cain and Abel* in comparison with Egyptian and Phœnician myths, and in relation to the conflict between pastoral and agricultural modes of life.

Mr. C. F. Tebbutt described the *Cart-front designs* of twelve English counties from Lincolnshire to Essex and Leicestershire: the Fenland borders seem to have been the distributing centre.

Mr. R. U. Sayce described *Rope-twisters* from many parts of the British Isles, and their development into a type which in Sweden is found geared to a driving wheel.

Prof. J. Murphy examined the *Psychological Origins of Magic* in relation to 'unconscious gesture' betraying wishes, and to the 'cave-art' of Palæolithic times.

Mrs. Nora H. Chadwick contributed a study of *Poetic Inspiration and the Trance of the Seer*, with illustrations from northern and western Europe, Asia, Polynesia, and Africa. Poetry does not differ essentially from chanted prose, but prophecy uses the most elevated speech of which the seer is capable. 'Inspiration' has reference primarily not to the form, but to the matter, and recent observers are stressing the intellectual element in the seer's equipment.

Ethnography.—Dr. C. von Fürer-Haimendorf described twelve months of *Field work among the Konyak Nagas of Assam*, who represent an old culture formerly prevalent over all Naga country.

Taro, not rice, is the staple crop; pigs, not cattle, are the sacrificial animals; there is elaborate face-tattooing; the chiefs form a powerful endogamous aristocracy; a sky god is worshipped, but almost no spirits.

Dr. A. N. Tucker examined the *Background of Central African Folktales*, the principal themes, the setting, and the historical and sociological data.

Mr. W. Fogg described *A tribal market in the Spanish zone of Morocco*, its organization for public security and legal transactions, its officials, trade groups and their functions, and the changes effected by the Spaniards.

Mr. H. A. Fosbrooke described *A new Bantu tribe*, the Sonjo of Tanganyika, who are now quite surrounded by Masai, as a result of tribal movement.

Cultural Regions were the subject of a joint discussion between the Sections of Anthropology and Geography. Prof. C. B. Fawcett presided and introduced the subject.

Dr. L. Dudley Stamp regarded all geographical regions as representing a characteristic co-distribution and interaction of physical and biological factors, to which man, on his part, reacts. In the synthesis of a geographical region the most permanent factors, such as position and structure, must be fundamental.

Prof. P. M. Roxby illustrated from the five specific regions of China the value of the human factor and its response to geographical conditions, in distinguishing and characterizing such regions. A parallel instance is the continent of North America.

Prof. J. L. Myres distinguished between culture-regions as a concept of ethnology, and geographical regions which (he agreed with Dr. Stamp) must be based on the more permanent factors. Up to a certain point indigenous Man behaved like any other animal; but when Man's reason began to react on geographical restrictions, its effects were incalculable, catastrophic, quite recent, and probably also ephemeral in comparison with physical and biological processes.

Lord Raglan asked for clearer definition of terms, and doubted the value of the conception of a Cultural Region in ethnology.

In general discussion attention was drawn to the development of this conception by American geographers, and to examples of human distributions which had been transitory. But it was contended also that for sociological purposes the geographical distribution of human activities deserved study and cartographical presentation.

Anthropology and Administration was the subject of a discussion in which Messrs. Kingsley Roth (Fiji), Fosbrooke (Tanganyika), Harvey (Burma), and Archey (New Zealand) took part.

Excursions were made to the Nottingham Caves, to Sherwood Forest and Laxton, to Cresswell Caves, and to Leicester Forum excavations.

The Folk-Industries of the Lindsey District, of Lincolnshire were well illustrated by an exhibit arranged by Mrs. Rudkin for the local folk-lore society.

International Association for European Ethnology and Folklore; Edinburgh Congress, 14-21 July, 1937.

191 This Association, formed in November, 1935, held a Congress in the New College, Edinburgh, from 14th to 21st July, 1937; the Scottish Anthropological and Folklore Society acting as hosts. Seventy-six delegates registered as members representing Belgium, Denmark, Estonia, Finland, Great Britain and Ireland, Holland, Lithuania, Norway, Sweden, Switzerland, and the United States.

A Presidential Address was delivered by Prof. Dr. Herman Geijer, of the University of Uppsala. Thirty-one papers were read. Those dealing with folklore included "Remarks upon methods of Surveying and Making Distribution Maps in the fields of Dialect and Folklore," by the President; "Scottish and Norwegian Ballads," by Prof. K. Liestol, Oslo; "Norse and Gaelic Folklore," by Dr. R. Th. Christiansen, Oslo; "The Stars in Eskimo Folklore," by Prof. W. Thalbitzer, Copenhagen; "Rites," by Dr. C. W. von Sydow, Lund; and "The Origins of the Ducking-Stool," by Prof. J. W. Spargo, Northwestern University, U.S.A.

Papers of technological and museum interest were "Simple Agricultural Implements of England," by Mr. R. U. Sayce, Manchester; "The Early History of Vehicles in Northern Europe," by Dr. G. Berg, Stockholm; "The Irish House," by Dr. Ake Campbell, Uppsala; and "Scandinavian Folk Museums," by Prof. Sigurd Erixon, Stockholm.

On the linguistic side Dr. Wm. Grant, Aberdeen, dealt with "The Scottish National Dictionary," Mr. J. C. Catford, Edinburgh, with "Scottish Dialects and the Proposed Linguistic Atlas of Scotland," Dr. G. S. Lowman, Brown University, U.S.A., with "The Linguistic Survey in the U.S.A. and Canada," Dr. R. Nordenstreng, Uppsala, made some helpful suggestions as to the solution of an ethnological problem in his paper on "The Riddle of the Finns, Frisians, and Fair Broad-heads." Of particularly Scottish interest was that by Mrs. M. M. Banks, President of the Folklore Society, on "The three Marts and the Man with the Wither."

During the Congress a "Ceilidh," arranged by Miss J. Bruce, Secretary of Highland Home Industries, Ltd., was performed by a group of

Gaelic-speaking women; and a display of Scottish Country Dancing was given at Roslin by a team of "bondagers" under the supervision of Mr. Ion C. B. Jamieson.

Throughout the Congress there was on view an exhibition of ethnological and folkloristic material of which the outstanding feature was the display of photographs and drawings of house-types and domestic and agricultural implements selected from the collection of the Irish Folklore Commission. Other exhibits were by the Landsmålsarkivet, Uppsala; the Nordic Museum, Stockholm; H.M. Office of Works; and Highland Home Industries, Ltd.

British Speleological Association. Second Annual Conference and Exhibition; Bristol, 23-26 July, 1937.

192 The Great Hall of the University of Bristol was partially transformed for this occasion into a Cave worthy of the gathering, which included Sir Arthur Keith, President of the Association, the Abbé H. Breuil, Dr. F. E. Zeuner, Miss Garrod, Dr. Marett, Professor E. K. Treatman, Mr. H. E. Baleb, and Mr. C. R. Hewer, organiser of the Continental Tour through Germany, Czechoslovakia and Austria which followed the Bristol meeting.

Members were accommodated in Manor Hall, a new hostel of the University, and were received by the Lord Mayor of Bristol and the University authorities. Notable papers were those of the Abbé Breuil on *French and Spanish Cave Art*, Dr. Zeuner on *Prehistoric Cultures and Climatic Fluctuations*, and Dr. L. S. Palmer on a *Chemical Method for testing the Continuity of Cave Streams*. There were also numerous valuable descriptions of particular groups of caves. Excursions were arranged to the Cheddar Caves and other caverns, with expert help from the Wessex Cave Club; in Lamb's Leer an aerial ropeway and illumination made exploration easy.

The recent work of the Speleological Association includes the scheduling of many caves and cave finds, the detection of closed caves by geophysical tests, the investigation of the aquatic cave-fauna, and the acquisition (through anonymous generosity) of the lease of Cragdale, a house with grounds at Settle, as headquarters and depository for documents.

REVIEWS

PHYSICAL ANTHROPOLOGY.

Zur Osteologie der Lappen. Von K. E. Schreiner. **193** 1. Band. Text mit 16 Tafeln und 20 Figuren im Text (1935). S. 294. 2. Band. Masstabellen und Tafeln (1931). S. 75 - Taf. 190. Instituttet for Sammenlignende Kulturforskning. Serie B, Skrifter, xvii, 1 u. 2. Oslo. London: Williams and Norgate. Price 110s. bound, 104s. 6d. unbound.

The publication of the second of these sumptuously produced volumes made it clear not only that all previous studies of the craniology of the Lapps had been so far surpassed that they would become relatively insignificant, but also that one of the most important researches relating to the craniology of any race had been completed, or nearly completed. It contains detailed indi-

vidual measurements of 351 skulls; contour tracings in three norma, representing three superposed outlines at different horizons in the case of each norma, and diophtographic tracings in four norma for 89 of the specimens—all these tracings being half scale; and 101 plates reproducing excellent photographs. Most of the last are of the crania—standardized aspects being shown—while there are 20 of juvenile specimens among them, but some are of other bones of the skeleton, the majority of these being pathological specimens. Particularly noteworthy plates are those of the head of a cadaver with corresponding full-face and lateral views of the skull below (Taf. cxlv), and of three mandibles showing the *torus alveolaris* developed to a remarkable degree.

Professor Weidenreich has recently called attention to the fact that some of the *Sinanthropus* lower jaws exhibit this abnormal condition, but for them it is relatively slight compared with the extreme cases found for the Lapps. No more complete or effective corpus of descriptive data relating to skulls of any race has yet been provided.

The text in the first volume is equally thorough. The material consists of skeletal remains of 582 individuals, of whom 101 were immature when they died, but the majority are represented by skulls only. The total 351 adult skulls from Finmark can be divided into two series: the first is made up by 302 specimens obtained from six grave-yards known to have been used principally in the eighteenth century, together with 18 from different sources and of various historical dates; the second series comprises the remaining 31 skulls which were found in stone cists or caves. A detailed account of previous studies of the osteology of the Lapps is given. This is not quite exhaustive, as Professor Schreiner has overlooked measurements of a few additional skulls given in the second edition of Flower's catalogue and in the Berlin, Heidelberg, Leipzig and Göttingen sections of *Die anthropologischen Sammlungen Deutschlands*, as well as a series, referred to below, measured by Hallsten. The cranial measurements are then treated character by character, comparisons being made between the groups from different grave-yards, which are rather small for this purpose, and with previously published material for Lapps and other racial populations of Europe and Asia. The writer trusts principally in the surer, but less sensational, statistical methods which were devised and first applied to anthropological material by Professor Karl Pearson. Means, constants of variability and numerous coefficients of correlation are given. The descriptive characters and cranial anomalies are treated in great detail, the most striking peculiarities of this kind being the high frequencies of a palatine torus and an alveolar torus of the mandible. Comparisons are made between the means for the adult series and those of 59 juvenile skulls divided into three age-groups.

By using generalized measures of resemblance based on 20 metrical characters, it is shown that in spite of their close resemblance the six series from different grave-yards cannot be considered to be samples drawn at random from a single homogeneous population. The reviewer would lay less stress on this fact, interpreted as evidence of racial heterogeneity, than Professor Schreiner does, though the latter does not hesitate to pool all the series for the purpose of comparing Lappic with other racial types. Samples representing small communities which are likely to become peculiarly inbred may well differ from one another to the extent observed because each may be composed of a number of closely-related individuals. A race can only be defined as a group within which local differences may be found for this reason. The variability of the total male sample is almost precisely of the same order as those of a number of European series which can only be accepted as racially homogeneous.

Mean measurements are given for the other bones of the skeleton, but the comparative material available for most of these is so meagre that their racial significance cannot be estimated at present. The proportions of different parts of the extremities, judged from the ratios of the lengths of the long bones, are certainly not strikingly peculiar for the Lapps. Pathological distortions and anomalous variations of the skeleton of the trunk and limbs are described and illustrated by numerous photographs. The mean measurements of the small series of prehistoric (chiefly Iron Age) skeletons are very close to those of the modern Lapps, the type

being brachycephalic and of short stature. Professor Schreiner suggests that they diverge slightly from the present-day type in the direction of the 'Nordic' Iron Age population of more southerly parts of Norway, but he admits that far more material would be required to substantiate this view.

In summarizing the results of his lengthy study, the author considers the theory, favoured by many anthropologists to-day, that the Lapps belong essentially to the group of brachycephalic peoples of Central Europe, little importance being attached to those superficial characteristics which suggest Mongoloid affinities. He concludes that from the earliest times for which we have any evidence relating to them they were mixed with both 'Nordic' and East Baltic elements, but the basic type of the population possessed characters which assigns it to an intermediate position between the Alpine and Mongoloid groups. These three must be supposed to have had a common origin.

Professor Schreiner only refers to measurements of skulls of Lapps given in the first and second parts of K. Hallsten's catalogue entitled *Matériau pour servir à la connaissance des crânes des peuples finnois* and published at Helsingfors in *Bidrag till Kännedom af Finlands Natur och Folk*, Häftet XXXV (1881). In the following year Hallsten gave measurements of 85 skulls of Lapps from another grave-yard, and in 1887 E. Hougberg added those of 10 more from a third grave-yard (in Häftet 44 of the same journal). Taking these series together, there are data for 195 modern adult crania from Uleaborg, the northern province of Finland adjoining the Norwegian province of Finmark. Unfortunately the skulls are not all sexed: 72 are supposed male, 55 female, and no sexes are given for the remaining 68. The means of the pooled male series were calculated by the present writer, and the coefficient of racial likeness was found with Professor Schreiner's pooled series. For 19 characters the crude value is $2.06 \pm .22$ and the reduced $2.26 \pm .24$. These indicate a remarkably close similarity in type, closer, for example, than that found in the case of two seventeenth century London series. But the selection of the skulls which were more obviously male from the available specimens from Finland which are actually male must have tended to make the means of the absolute measurements used somewhat too large for this series. Actually they tend to be larger for the Finnish than for the Norwegian Lapps, and there is a clear suggestion that the resemblance between the two types would be appreciably closer if allowance could be made for the selection referred to. It is possible that the correction required would be sufficient to lead to the conclusion that the two types cannot be differentiated. Even without it the resemblance between the two total series from Finland and Norway is much closer than that found between some pairs of the component series from different grave-yards in Norway. These results indicate clearly the danger of attributing racial significance to the differences found between local groups. They are interesting as an example, and in giving this the reviewer does not mean to imply that they conflict with any of the conclusions which are reached by Professor Schreiner in his valuable monograph. G. M. MORANT.

Rassenkunde deutscher Gaue. Bauern im südlichen Allgäu, Lechtal und Bregenzer Wald.
194 Von Dr. Bruno K. Schultz. 35 tables, 244 illustrations, 2 diagrams in the text and in plates. J. F. Lehmann's Verlag, Munich. Price, paper M. 11; cloth M. 12.60. Export price, paper M. 8.25; cloth M. 9.45.

The author gives a detailed study of the native population of a comparatively isolated mountain valley

in South Germany in order to get as accurate an idea as possible of the physical type and the race composition of that population. In all, 844 people of both sexes have been measured and examined. By far the greatest part of the investigation deals with characters considered singly. The fact that for comparative purposes the corresponding constants of numerous other population groups and instructive illustrations are given makes this part especially valuable. Another part is concerned with the combination of certain characters. Also here instructive illustrations are given which make it clear that we are by no means dealing with a 'homogeneous mixture,' since certain combinations occur more frequently than others. Combinations completely corresponding to those of the European 'races' (Nordic, etc.) are not frequent. Summing up, the author comes to the conclusion that the population under investigation represents a race mixture in which particularly the 'Nordic,' the 'Dinaric' and the 'Alpine' races are participating. The book has an appendix, numerous tables and good photographs, and it is undoubtedly a valuable contribution to our knowledge of the European population. I do not hesitate to recommend the work to every student of physical anthropology.

A. H. MÜNTER.

The Living Body; Patterns of Life; Evolution—Fact and Theory. By H. G. Wells, Julian Huxley and G. P. Wells. London, Cassell & Co., 1936: 239; 271 pp. 4s. each.

'The Science of Life,' by H. G. Wells, Julian Huxley

and G. P. Wells has been revised, brought up to date, and split into nine handy volumes. The first three are 'The Living Body,' 'Patterns of Life,' and 'Evolution—Fact and Theory.' They are written in a chatty informative style of popular language suitable for a fourth-form boy. 'The Living Body' consists of a smattering of anatomy and physiology, the body being regarded in the mechanistic way as an automatic self-repairing machine. 'Patterns of Life' is another smattering of comparative anatomy and botany, with a glance at bacteriology thrown in. 'Evolution—Fact and Theory' starts with a smattering of geology and proceeds to review the chief theories of evolution and pronounces against the vitalistic theory and the theory that there is a purpose behind evolution. The explanation given is quite simple, 'simple enough to be misunderstood,' as Sir Arthur Eddington calls Schrödinger's theory.

As the matter is merely introductory, it is a pity that each section does not contain a bibliography to point to further reading. Very few books are referred to in the text. The text itself requires revision to eliminate awkward words ('supplely,' 'gapped,' 'semivertebrates') and grammatical errors (mixed tenses, mixed singulars and plurals). The caption to Fig. 2 of 'Evolution' refers to 'darker' and 'darkened' parts of the diagram, which is, however, all of one tint. If this figure comes from the original edition of 'The Science of Life,' there should have been plenty of time to correct it for the serial edition. Otherwise the many illustrations are excellent and perhaps the best part of the work. C. S.

CORRESPONDENCE.

Tattooing and Healing. (Cf. MAN, 1937, 54.)

196 SIR.—Soot is not uncommon in ritual. Cuts figure widely, especially in puberty ceremonies and at funerals. Tattooing is a combination of both and makes its first appearance in the life of a man at maturity, that is as a general rule (Cf. Hocart, *The Progress of Man*, 148: 158; 167). The purpose of these rites is a full life.

In Egypt tattooing is far more specific in its use; it is often used to cure ailments which may be narrowly defined as to their cause, for instance troubles due to fumes from fish a-cooking (J. S. Wilmore, *The Spoken Arabic of Egypt*, London, 1901, p. 365. Cf. Miss Blackman, *The Fellahin of Upper Egypt*, p. 53). Miss Blackman has also found tattooing used for specific ailments such as headache, toothache, weak eye, possession.

What evidence, it may be asked, have we that these specific uses are derived from the initiatory use? The evidence is that other uses of tattooing in Egypt and thereabouts retain an initiatory colouring. Miss Blackman has the impression that in Egypt tattooing is still a sign of manhood (l.c. 55). It is also used for sex-appeal (Wilmore, l.c.—Miss Winifred Smeaton, *Tattooing among the Arabs of Iraq*, *Amer. Anthr.*, 1937, p. 54). Comparative evidence tells us that initiation confers manly or womanly welfare, which includes sexual potency and the power to procreate (*Initiation and Manhood*, MAN, 1935, 23). Tattooing thus acquires a sexual connotation which may be emphasized at the expense of other elements of life-giving. This preparation for a sexual life comes out very plainly in a custom recorded by Dr. H. A. Winkler (*Bauern zwischen Wasser und Wüste*, Stuttgart, 1934, p. 133f). In Kīman near Quft they paint tattoo patterns on the face and hands of a maiden that has died ripe for marriage. 'She is adorned

'in this way, because—if she was good—she will 'become a houri in paradise.' In other words she is prepared as a bride.

In Iraq tattooing is used to induce pregnancy (Miss Smeaton, l.c., 54). This use also derives naturally from the initiatory which confers manly or womanly fruitfulness. Without it a man or a woman is not successful in the things appertaining to his or her sex.

An Iraqi woman who has lost several children in succession thinks she can save the next by having it tattooed. Naturally, since initiation, like other generalized rituals, confers a long and vigorous life. Another theory however has crept in here, the theory of the evil-eye. The patterns on boys in one village are tattooed like those of girls to avert the evil eye by making them look as if they belonged to the less favoured, and so less envied sex. This leads to results which stand in flat contradiction to the original purpose which is to make boys into men by endowing them with all that belongs to men.

There are critics who will not be satisfied because they cannot see the initiatory use of tattooing gradually narrowing down to specific needs. Such critics will never be satisfied because they will never see development, though they sit till doomsday waiting. They think they can see evolution because they have been brought up to believe in it; as a matter of fact all they see is a great variety of forms which can only be satisfactorily explained on the supposition that they have all developed out of the same originals. That is all we have the right to expect in the development of human institutions: to formulate a theory that will explain all the variations in the simplest possible way without invoking any processes that have not been observed.

We know that initiation confers a successful maturity, and we know from records of circumcision and the

evidence of our contemporaries that a single episode may be lifted out of initiation and used for a very specific purpose. In the first place then it is quite possible that tattooing has been isolated and narrowed down in this way. Secondly, if we assume that this happened we are able to fit all the pieces of the meaningless jumble of facts into a simple picture with meaning. We cease merely to collect and begin to connect.

All the uses of tattooing which we have reviewed are labelled by anthropologists 'magical,' implying that they do not really work. If they did work they would be labelled 'rational medicine.' But supposing it turned out, as may happen any day, that tattooing does work in some cases? Suppose, for argument's sake, that our medical men struck a new trail which led them to the discovery that tattooing did remove some causes of headache; then we should have to transfer that use of tattooing to 'rational medicine' while leaving all the others in the department of 'magic.' Obviously we cannot base our classifications on mere opinion which may change at any time, and the classification into rational and magical is purely a matter of opinion. The Egyptians are of opinion that tattooing works, and they can give you plenty of concrete cases in support of that opinion. The European physician has never even tried to justify his opinion. No doubt he is quite justified in refusing to do so. In refusing even to examine the claims of tattooing he is probably saving himself from what would probably turn out to be a wild goose chase after a new remedy for headache. Still his opinion is only an opinion which may be reversed at any time, for there are more things in heaven and earth than are dreamt of in our medical schools.

We must have something more stable than an opinion on which to base our classifications, something objective.

There is one objective difference between our hygienic use of circumcision, and tattooing in Egyptian medicine: after detaching circumcision from the system which we describe as initiation we have worked it into another system which we call hygiene. In Egypt tattooing has broken loose from initiation without attaching itself to any other system. At least it seems so, as far as the evidence now stands. It must be remembered that no attempt has been made, as far as I know, to get at the underlying principles. Perhaps these have dropped out, and the different uses of tattooing not only seem, but are *disjecta membra*.

However that may be in Egypt we found in Iraq a case of tattooing being caught up into a different system of ideas which we may sum up as the 'evil-eye.' The new interpretation may seem to us as 'magical' as the old one; but that is neither here nor there, the process is the same as that which has led from the old initiatory to the new hygienic application of circumcision, namely reinterpreting old practices in the light of new theories. Processes are objective things, and it is on processes that the science of culture must be built, just like any other science.

A. M. HOCART.

An Initiation Sermon and its Text. Illustrated.

197 SIR.—The accompanying photographs show a pole with a calabash balanced on top which I came across while on trek near the Anglo-French boundary on the North Bank of the MacCarthy Island Province of the Gambia. The village, which I was visiting, is in the Jollof section of the Province, peopled by offshoots of the ancient kingdom of Sine Saloum.

About 20 to 24 feet in height, the pole stood in the middle of the 'home' farms of the village, some 30 or 40 yards from the houses and, as will be seen from the photographs, just on the edge of the sandy path which leads through the farms to the village. Its purpose

was explained to me as follows: Each year, during the initiation rites undergone by boys reaching puberty, in the evening of the day preceding the final rite of circumcision, the initiates, who have for some time previously been living in grass huts built away in the 'bush,' are brought to the village and shown this pole, but with no calabash on top. They show surprise at its presence, it not having been there when they left the village to begin their initiation training.

An old man of the village, usually the one who will perform the circumcision and who has been responsible for the training of the boys while in the 'bush,' then

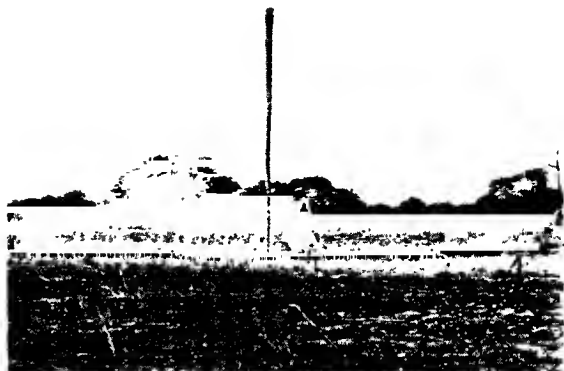


FIG. 1. INITIATION POLE, WITH CALABASH IN A JOLOF VILLAGE, GAMBIA PROVINCE.

takes the opportunity to deliver a sermon on 'the world, 'the flesh and the Devil,' explaining the possible evils of incontinence, unfaithfulness and so on, ending somewhat in this fashion:

'It is the Devil who tempts mankind and if you doubt that the Devil exists, look on that pole, for you know it was not here when you went to the "bush" and now you find it here. It is the Devil who has brought it, to show what power he has.' In due course the boys retire to bed and the next morning are called upon by the old man to come and see the pole again. He is greatly perturbed in case they may have failed to heed his evening homily, but now let no one doubt the existence and power of the Devil, for is there not now a calabash (or pot, or stone) on the top of the pole where before there was no such thing? Clearly no man can have climbed such a pole in the night, so who else can have done this amazing thing than the Devil?

The pole with its calabash is left standing for a few weeks, until one morning it is found to have vanished in the night, to reappear at the next circumcision ceremony. I was fortunate enough to pass through the village and see this evidence of the Devil's existence before he came and spirited it away.

G. N. N. NUNN.

The Secretariat, Accra.

Correction: MAN, 1937, 185.

198 In the last paragraph of my postscript, the excavations at Hadda were ascribed (by mistake) to Monsieur Hackin, who was working in the same neighbourhood at the same time. They were in fact conducted by Monsieur J. J. Barthoux.

SIMONE CORBIAU.



FIG. 1. SQUIRREL-HEADED PESTLE OF DIABASE:
OKANAGAN VALLEY, B.C.

Rather less than full size.

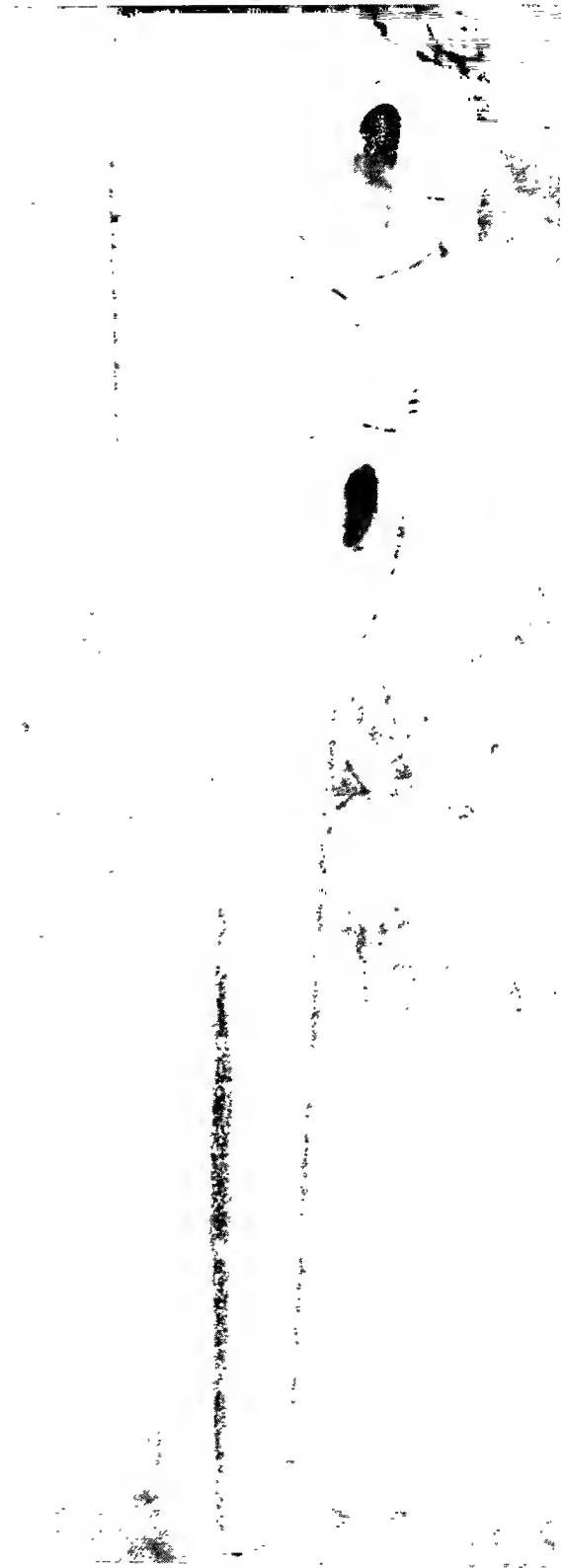


FIG. 2. PIPE-STEM OF SOAPSTONE CARVED WITH A
LIZARD: PENTICTON, B.C.

Full size.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 199-219

NOVEMBER, 1937

ORIGINAL ARTICLES.

America: North.

With Plate L.

Williams : Digby.

A CARVED PESTLE AND PIPE-STEM FROM BRITISH COLUMBIA. By M. P. Williams, Kelowna Ranch, B.C. With a note by Adrian Digby, British Museum.

199 The carved stone pestle or hammer-stone figured in Plate L.1 was found in 1906 on the shore of a bay of Wood's Lake, Okanagan Valley, British Columbia, by the late Mr. F. C. Baker. It is now in the possession of Mr. M. P. Williams, Hanthorpe Ranch, Winfield, Okanagan Valley, who sends the following notes on it :—" The rock of the pestle is diabase. The carved head represents the Columbia ground-squirrel. Some tribes of North Western American Indians believed that a guardian spirit (usually some animal) adopted by an Indian as his personal totem, would, if he made and kept near him a carved representation of the animal or of some part of it, take up his abode with him, and so be always at hand to assist him at need."

Mr. Adrian Digby, of the British Museum, contributes the following note :—" Pestles from America with a slightly expanded base are common in various areas in the United States and the West Indies, although a zoomorphic head such as this has no exact counterparts in the British Museum. There is, however, one with a rudimentary head, which is not nearly so elaborate as the specimen in question from British Columbia.

" Whether the head depicts a squirrel, or not, I am not prepared to say. Any way, I can find no definite reference to squirrels in North West Coast Indian mythology, though this does not mean that there is not any.

" Mr. C. Hill-Tout, *British North America*, page 139, says that these pestles are hammers, though occasionally they may be employed by the old people to crush or pound tough meat or berries or fish, when other food is scarce.

" Pounders or hammers of this general type are represented in the British Museum by specimens from British Columbia, Ohio (Squire & Davis collection) and the West Indies:

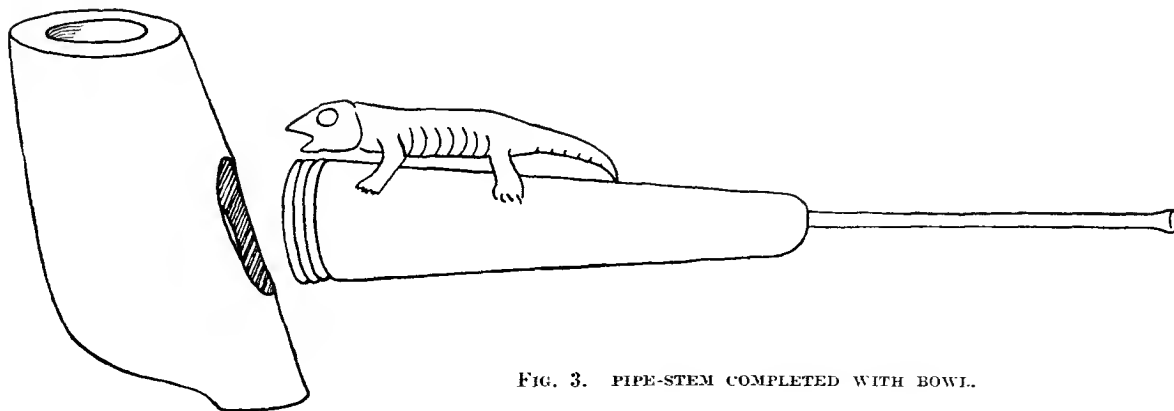


FIG. 3. PIPE-STEM COMPLETED WITH BOWL.

“ though the last-named have not the expanded base.”

The carved pipe-stem in Plate L.2 is of soapstone. Mr. Williams writes that “ it was found in a shack at Princeton, not far from Kelowna Ranch, and still in the Okanagan (Salish) Indian country.” It is in the collection of Mr. Reginald Atkinson of Pentteton. It is a straight tube, like a large cigar-holder, of the exact size of the photograph. Such soapstone is found within fifteen miles of the spot where the pipe was found. Carved in relief at the wider end is a lizard, about four inches long, perfectly modelled, with every rib and vertebra showing, and the bandy legs exactly reproduced. Mr. James Coleman, Indian Agent at Vernon, British Columbia has sent to Mr. Williams, under date 9th June, 1936 (File A.5), the following information derived from Chief Louis, of the Okanagan Indian Reserve, whom Mr. Williams describes as an intelligent and truthful man:—

“ He states there were two classes of pipes—peace pipes and doctor’s pipes—and your’s is part of a doctor’s pipe. The bowl and stem are missing. I enclose sketch of the complete pipe with notations of interest.

“ The reptile carved on the pipe is the doctor’s ‘ guiding spirit ’ or whatever you would call it.

“ It is not the common lizard known to them as ‘ Kill-kill-hu-as ’ but what they call a horned toad, or in Indian ‘ Ma-mak-ah ’ found in the dry regions of the Southern part of the district. It is about 2½ inches to 3 inches long and 1½ inches to 2 inches wide, with the appearance of white rubber and looks very much like a child’s rubber toy. It has the peculiarity that if it is turned on its back and tickled that it will distend itself considerably for the time being. It has the typical ring or jaw bone as shown on your photograph and these develop into two small knobs on the head giving it the name of being ‘ horned ’. I do not know the reptile or its proper name, but no doubt you could find it out from some authority.”

Mr. Coleman adds, from the same informant, that this soapstone is originally white, and that the dark colour is imparted by rubbing the pipe with swamp-grass leaves used like sandpaper. The rings worked on the wider end of the pipe-stem would be inlaid with gold or silver. Animals, insects, and reptiles are represented according to the ‘ doctor’s ’ adoption, and to the spirit he represents. In the narrower end would be inserted a stem of ‘ long-wood ’. The ‘ peace-pipes ’ are plain, and much larger than the ‘ doctor’s pipes ’.

OSIRIS AND HIS RITES, II. By G. D. Hornblower, F.S.A. (Cf. MAN, 1937, 186.)

RELATIONSHIP TO THE KING AND AGRICULTURE MYSTERIES.

200 The sequel to the sacred marriage was of course the birth of the new Horus: it is not recorded in the text, which is restricted to instructions to priests concerning the magical activities attending the rites, but at Philae, where there is another series of low-reliefs illustrative of the event, scenes are carved showing Isis suckling the young Horus; some of them give Hathor as the mother and this is the case with all the similar scenes at Denderah—not unnaturally, since Denderah was the centre of Hathor worship (for easy reference see Weigall, *Guide to the Antiquities of Upper Egypt*, pp. 45 and 479-80). This confusion is quite explicable, for Isis, as noted previously, was, like Hathor, a manifestation of the ancient mother-goddess and, as such, each was mother of the young god who should bring prosperity to the country and each, according to various texts, brought up the child in the secret safety of the marsh-land, with its concealing

reeds. Their functions, also, with regard to the older Horus and Osiris respectively were identical, as their names prove: Hathor was the ‘ house ’ or ‘ seat ’ of Horus while the name Isis, græcized from *ast* (pronounced probably *isi*) actually means the ‘ seat ’ or ‘ throne.’ Isis, as wife of Osiris was his complement and his protectress, as Hathor was of the earlier Horian kings, a relationship well displayed in certain statues of Mycerinus, now in the museums of Cairo and Boston; these are connected with various nomes or districts, the nome-goddess stands on his left, but on the right, in each case, stands Hathor with her arm round him protectively.

Isis was indeed, to use a Hindu term, the *shakti* or ‘ female principle ’ of Osiris, a term denoting also ‘ power ’ and so, just as Parvati, the *shakti* of Shiva, is his complement and without her he would be powerless, so Isis was *shakti* to Osiris, personified in myth as his sister-wife: also,

like Parvati, she was by origin no less than the great mother goddess. Plutarch seems to have arrived at a similar idea when he wrote that she was "that property of Nature which was 'feminine'" (sec. 53).

There is a similar want of individual definition in the case of Nephthys, sister of Isis and, if we may judge by the hymn quoted in the previous article from Pleyte and others similar, her co-mate to Osiris. In the *Pyramid Texts*, pars. 1786-7, she is said, like Isis, to rejoice in his love and in par. 623 she suckles Horus. The name signifies 'mistress of the house' which is a usual oriental epithet for wife (in Egypt *Sitt el beit*). Plutarch relates a tradition that she was the wife of Set: if this was an authentic legend the interpretation would seem to be that she was by origin the wife of the chief of the Set people conquered by the Horians and taken as the spoils of war into the conqueror's harem: possibly, on the other hand, her supposed existence was merely a case of duplication.

The new Horus was known as 'the son of Isis' (in Greek *Harseisis*) and also 'Horus the Child' (*Harpocrates*) and thus distinguished from the Elder Horus (*Haroeris*); in spite of this formal distinction he was commonly confused in the myths with the elder. An instance of this confusion is to be seen in one of his epithets, 'Unifier of the Two Lands' (*Samtawi*) which was of course appropriate, if we follow the historical sketch of the earlier article, to the elder Horus; it also brings the younger into close connexion with the king, one of whose chief titles was 'Lord of the Two Lands' and on whose thrones of ceremony the unification was always represented by the tying together of lotus and papyrus, symbols of the Lower and Upper Lands.

Horus then, patron-protector of the nation, was annually reborn and the vigour of the country renewed, a result expressed literally in one of the scenes of the rite depicted at Denderah: the young Horus, seated on a chair, looks at Osiris on the bier on which he lies for his yearly miracle and says "(when) Horus is good, the plants 'sprout'" (Lanzzone, *Diz. Mit.*, II, 758 and Plate CCLXVIII. With his rebirth the Horian essence that resided in the king and made him a source of strength and prosperity to the country, was also revitalized, a result portrayed at Philae by the low-reliefs which depict Isis bestowing the rule on the king as Horus. Since this process

depended on the miraculous resuscitation of Osiris, the relation between him and the king becomes apparent and the scene sculptured in the temple of Seti I at Abydos stands out as of the highest consequence to the king and his people.

Another rite designed for the renewed invigoration of the king, besides this annual one, was the *Sed* festival, carried out at varying periods. It is now generally agreed that it was instituted in place of an older method of preserving the country's prosperity which consisted in killing the king when his powers waned, lest with them, according to primitive beliefs, that prosperity too should fail. Newberry has shown reason to think that the king's harem had an important share in the matter (see his *Presidential Address to the Anthropological section of the British Association for the Advancement of Science*, 1924). The object of the *Sed* festival was the same as that of the annual Osirian rite and it is thus natural that the king should wear for the occasion the Osirian guise, even though, as Gardiner, following Kees, concludes, it was but the usual dress of ancient Egyptian kings.

The intervention of the royal harem in the *sed* ceremony seems to indicate that the king's powers on behalf of the country were thought to depend on his virility—a theory held by some primitive peoples till quite recently—and here we may probably see the link connecting the idea of *shakti* as feminine principle with that of 'power.' Yet history records that some Egyptian kings celebrated several *sed* festivals, some quite early in their reign, and it is evident that the primitive meaning of it had been lost or was prudently kept in limbo, and that the ceremony had become generalized: it was besides an occasion for the display of royal splendour and power and an enhancement of prestige, always important to royalty.

The connexion of Osiris with agriculture has been made clear; it is still further defined by the date of the rite which was, taking Gardiner's interpretation, confirmed by the hymns called 'Lamentations of Isis,' in the latter half of the month of Hathor (Greek *Athyra*): this was the last of the four composing the Season of the Flood (*Akhet*), the flood was then approaching its lowest ebb and the Spring (*Piret*) was at hand, or, to speak in the Egyptian figure, Osiris was dying and no Horus yet born to bring the

crops to life: Osiris must be recalled and the new Horus conceived. Thus did the season fit with the event.

The sacred rites recorded in the temple at Denderah were of a very solemn character; they were inaugurated by a great procession of priests from the different parts of the country, headed by the king, all in full panoply, as shown in the low-reliefs sculptured in one of the chambers: they were carried out in great secrecy, the 7th chapter (Loret's classification) being headed: "To know a mystery that is not seen or heard, but is handed down from father to son."

The actual text is most obscure and confused, perhaps made from a papyrus roll containing side-notes and repetitions not finally edited. It relates that, on the 12th day of the month, sixteen images of Osiris, as Chief of the Westerners, that is of the dead, were made in moulds of gold and set on gold pedestals, one in each district which was a centre of his worship; they were composed of barley and sand, with some incense, and were mixed with water from the sacred lake and kneaded in the shape of a mummy with the regalia of Osiris; many aromatic substances were introduced, with valuable stones—probably crushed to powder—and the usual amulets. Other similar models were made of Sukkur, the Memphian god of the dead with whom Osiris was equated. The days of mixing, moulding and drying the paste were strictly fixed, as they were for all the activities connected with the rites. Models were also made of the sixteen limbs of the god and placed in a silver box under the head of the image. On the 24th day the image was swathed as a mummy and placed in a coffer on branches of a sycamore tree and on the 30th was taken to the tomb-like place where its predecessor of the previous year had been laid but had been removed and buried in a cemetery on the 24th day—but the last portion was conducted with variations in the different districts.

The use of barley and other crops for the models of Osiris, and of sand to represent the soil, point of course to his connexion with agriculture, but much more so does the Festival of Ploughing which took place in the latter part of the great festival, comparable to the Chinese emperor's ceremonial ploughing on the first day of the year. The ploughing was done in a sacred field, with the very suitable name of "Place of

"Rejuvenation"; in it also were sown the various crops required in the rite, including the special linen for the swathing of the images as mummies. Another feature of interest was a highly illuminated procession of the images, together with those of many of the national gods, in model reed-boats on a sacred pond.

The sacred marriage is not mentioned in the text but its culminating episode is portrayed in the low-reliefs accompanying it as plainly as in the temple of Seti I at Abydos, and equally so are the scenes preparatory to it. The object of the sculptures is to exhibit Osiris in the various centres of his worship at one moment or another of the act of temporary revivification (see, for the text, Loret, *op. cit.*, and, in summary, Lanzzone, *Diz. Mit.*, Vol. II, pp. 276, ff.; for the low-reliefs, Lanzzone, Vol. III, Pls. CCLXVIII-CCXCII. after Mariette's *Dendérah*. A selection from both appears in Budge's 'Osiris,' Vol. II, Chs. xv and xvi), Osiris is always represented as a mummy and in one scene that feature is carried so far that he is represented lying on a bier under which are the four 'canopic' jars which hold his viscera.

On the last day of the festival, when the Osirian figures were entombed, the festival of the 'Raising of the *Djed*' was held in the city named 'House of the Soul of the Lord of the *Djed*,' known to the Greeks as Mendes. 'The Lord of the *Djed*' was always taken till lately to be Osiris, and his 'soul' to be his incarnation in the form of a sacred ram. But the priests of Mendes entitled the animal "Living soul of Rê, living soul of Shu, living soul of Keb and living soul of Osiris" and also called it "king of the animals" (see Erman *Handbook of Egyptian Religion*, Eng. trans., p. 207). Osiris was then only one of several gods connected by the priests with the ram and it seems as if it was, in fact, a primitive sacred animal which was given relationship with the great national gods out of policy—Osiris, too, had his own sacred animal, the Apis bull. Sethe has shown that the *djed* was not the exclusive attribute of Osiris; his conclusion has been confirmed by Firth's discoveries in the early temple of Zoser at Saqqâra, which proved that it was by origin an important element in the architecture of the earliest ages when buildings were made of wattle-and-daub with palm-trunks as roof-timbers. With the growth of settled security larger temples were

built and columns were required as supports for the wider roofs: they were composed each of four bundles of reeds fitted into one another telescopically to gain greater height, a band was fastened round the upper end of each bundle and the heads of the reeds hung down, the whole forming a figure which, when translated into stone, as was done in that temple, became the *djed* in the conventional form known to us (see the *Annales du Service*, Cairo, Vols. XXVII and XXVIII). The column became the symbol of strong support and was used as such in hieroglyphs. The raising of the *djed* thus signified the bestowing of this quality on the person for whom the ceremony was instituted. Osiris was now once more a mummy entombed while new life had been given to his son, the Horus-king; surely, then, the *djed* was raised for him and not for Osiris.

This suggestion is supported by two facts referred to by Gardiner in his review (*J.E.A.*, Vol. II, pp. 123-4): on the first day of Spring, which followed the last of the Flood-season, the great New Year festival of Khoiak was celebrated throughout the land, its other name being *Neheb-kau*. This festival was "considered the right and proper occasion for any Pharaoh to ascend the throne" and was the day when Horus "claimed to have assumed the kingship"; it was also the "conventional date for the celebration of the *sed*-festival." In short, this, the first day of Spring and, in the Horian reckoning, of the New Year, was one of general re-invigoration for the Horus-king and his people and was preceded by the setting up of the magical symbol, the *djed*, to ensure for him, besides his other gifts from the gods, that of strength and endurance.

In all this the dominance of the Horian cult is clear; it is strongly impressed, for example, on the scene depicted in our Plate (see the previous article, p. 230, 1st col.). This cult was of the oldest, quasi-totemic in character, and the beliefs attending it were very primitive; they were thus deeply rooted in the people and not even the popularity of the later Osirian cult could annul them. If, then, the festival had for its object the invigoration of the king, it was in his quality as incarnation of the old Horus and not as son of the dead Osiris a conclusion which has strong confirmation in the scene representing the raising of the *djed* published by Blackman, after Brugsch, in *Myth and Ritual*, pp. 22. f. and fig. 4;

the onlookers take sides and fight, shouting 'I choose the Horus Such-a-one.'

The name *Neheb-kau* was translated by Gardiner as 'uniting the *kas*,' but later the Berlin Dictionary gave 'bestowing dignity' (see also A. W. Shorter in *J.E.A.*, Vol. XXI, pp. 41, ff.): the latter interpretation might possibly suggest an inference that the festival covered a primitive rite for the benefit of the people's protective *genii*, their *kas*, during the coming year. The action was attributed in the *Pyramid Texts* (pars. 311, 512 and 719) to the king who had become, on his death, an Osiris.

One of the most interesting considerations concerning these festivals is their very primitive nature; a quasi-totemic king with powers over nature, a sacred marriage, with the great Mistress of Magic as wife, who donned for the occasion a totemic form, a consequent annual re-invigoration of the king and, in addition, a greater one at varying intervals in which his harem was concerned—in all of this the sun-cult had no account, for it was a later arrival in the world of magico-religion, a matter for kings and courtiers, inclined to become theological, not to say sophisticated, and too remote on high to enter into the simple primitive doings of older times.

Yet the sun-cult must have its share, officially, in the rites, and this was effected by the ritual recorded in the temples at Denderah, Edfou and Philae and published by H. Junker in *Die Stundenwachen in dem Osirismysterien*. Vienna, 1910. Here the simple old ritual is completely transformed; many gods attend on Osiris lying on his bier, weary of heart; they keep evil from him, protect him from his enemies, present him with aromatic offerings, give him 'life and power'—all of the conventional activities of the sun-cult as displayed in the *Pyramid Texts*. Rê himself has a large part in the ritual, always as a most resplendent deity. In one passage Osiris flies down from the solar heaven among the stars, as a magnificent spirit, to unite himself joyfully with his body; he flies as a falcon to his shrine at Denderah: here the solar paradise has found a way into the story and the simple revivification of Osiris has become a theme of radiant spirit-life. The 'Two Sisters,' Isis and Nephthys, frequently appear; they give Osiris all their care, full of lamentations and fully earning the conventional name of 'The Mourners'; they record their collecting of the god's limbs, they cry forth their

love, and call on him to rise. There are many repetitions and it would almost seem that the editors, like those of the *Pyramid Texts*, made great efforts to lengthen out their work. The frame-work of the whole is a system of watches for guarding the inert Osiris who lies on his bier, with his limbs collected by his 'two sisters,' aided by Horus and sometimes by Geb, the Earth-god, who was reckoned in the solar theology as father of Osiris: twenty-four watches are set down, twelve for day and twelve for night and a guardian god was appointed for each hour, to keep off enemies. Low-reliefs on the walls provide a limited number of illustrations to the texts, they are far too long to allow of full representation.

The guardianship against enemies seems to have been an essential part of the Osirian rites, reminiscent doubtless of the wars with Set, as may be gathered from the inscriptions in the tomb of Ikhnofret of the 12th Dynasty in which he relates that he was charged by the king with the preparation and execution of the Osirian rites at Abydos, where the tomb of Osiris was reputed to be. He said: "I celebrated the (feast of) 'Going Forth' of Upewawet when he proceeded to champion his father. I celebrated the 'Great Going Forth,' following the god at his going . . . I led the way of the god to his tomb before Peker: I championed Wenefere at 'That Day of the Great Conflict'; I slew all the enemies upon the flats of Nedyt" (from Breasted's translation in *Ancient Records*, Vol. I, p. 300; see also H. Schäfer: *Die Mysterien des Osiris in Abydos*, Leipzig, 1904). It appears that at Abydos a first procession was formed to represent the son of Osiris and his followers going out to fight his father's enemies and a second one to take the dead Osiris in honour to his tomb. (*Nedyt* was the place, still unidentified, where the slaying of Osiris traditionally took place. Upewawet was a local god at Abydos and his name, which means the 'Opener of the Ways,' may have been substituted for that of Horus out of respect for the local worship, or because he was his mother's eldest son, according to the Solar myth, and opened her womb—see Sethe's *Dramatische Texte*, I, p. 29).

Schäfer thinks that the guardianship of the dead Osiris by the gods was ritually enacted during the ceremony recorded in the tomb, which must have taken some days to perform.

No doubt the parts of the gods were taken by priests dressed and masked to represent them and that the rites were carried out, as so many others, in the manner of drama (see Sidney Smith in *Budge From Fetish to God*, pp. 429, ff.).

Here the ritual is not confined to the secret incantations and practices of priests but is carried out in the open so that the public too could take its part in it. How rough that might be is indicated in the fighting at the raising of the *djed* referred to above and again in the very vigorous fight at Papremis between the votaries of the god and their opponents recorded by Herodotus (II, 63—the occasion was perhaps the local festival of Osiris). Such a battle may have been fought round the procession at Abydos, in imitation of the wars of Set and Horus, just as, for example, in the church of the Holy Sepulchre at Jerusalem, till not long ago, zealous devotees at Easter-tide would, in their excitement, imitate events of the Crucifixion. The Osirian festivals, like others, attracted throngs of people and were doubtless the occasion for much fairing and merry-making, as in the modern *moolid* (anniversary of a Muslim saint's reputed birthday); rustic humour would play its usual part, some of it already touched on in the previous article (MAN, 1937, 186) in connexion with the Osirian phallus. The miniature procession of gods in boats ordered in the Denderah text may have been the local version of a real procession on the Nile or a large sacred lake at Abydos and if so, this was perhaps the 'Great Going Forth' which was put in charge of Ikhnofret and would of course have been a great occasion for the discharge of popular feeling.

The texts give no picture of the Osirian rites as a whole and it is impossible, with present knowledge, to make a satisfactory reconstruction. The 24-hour watch may perhaps have spread over the four days calculated by Schäfer or even the nineteen of the Denderah text, or again the rites of Abydos may have differed from those of Denderah and elsewhere.

The Denderah text says nothing of the ceremony of revivification but only of the re-interment of Osiris, but there can be no doubt that the scenes depicted on the low-reliefs were represented in some way, with priests impersonating the deities engaged; whether the sacred marriage was enacted, in reality or simulation, either here or in the case of Amûn-rê at Thebes or Horus

at Edfou, we cannot expect to know, any more than at Babylon or in Phoenicia or elsewhere in the Near East where such marriages have been reported. We have, however, some assurance from literature of the ritual carrying out of the scenes depicted on the low-reliefs. There is for example a hymn published by Budge in his 'Osiris,' Vol. II, pp. 59, ff., called, like others similar, "The Lamentations of Isis and "Nephthys." The introduction tells us that it was for use at Abydos in the Osirian rites, having a direct effect, which was of course, in our modern parlance, magical. The date of the rites is given as the 25th of the fourth month (*Hathor*) of the Flood-season. On that day breath was brought to the nostrils of Osiris, he made happy the hearts of the Two sisters and his son Horus was placed on his throne. The hymn begins, as usual "Come to thy house"; it contains much lamentation with protestations of love; it has much of the character of incantations of the early kind which, starting with the *Pyramid Texts*, developed strongly in the Coffin Texts of the Middle Kingdom and still more extravagantly in the magical texts known as 'The Book of the Dead.' At the end are instructions for the impersonation of the Two Sisters by two maidens. Another hymn (pp. 44, ff.) was written as a magic spell for the use of the dead who through the recitation of it would have a glorious after-life like that of Osiris. It was to be recited, presumably by the class of priests answering to Christian chantry-priests, on the 22nd to the 26th days of the month of Hathor which were evidently the culminating days of the festival; the 25th, called the day of "Divinization" (*netryt*), referred to the bringing back to life of Osiris and the 26th was the feast of Sukkur which, as Sethe has shown, had much to do with the kingship. The hymn contains the usual lamentations and cries for the loved one; Osiris boasts of bearing a child to Osiris, telling of the child's revenge on Set, of the embalming of the dead god and of his revival and renewal of virility (p. 49, no. 16), with the incantations that were to effect that miracle. The life-giving Nile obeys Osiris and all plants sprout at his coming; these hymns provide, in fact, an epitome of the status of Osiris, his passion and his powers.

If the fable of Osiris is stripped of its Egyptian dressings he is revealed as one of a trinity of

deities familiar in the Near East, consisting of the Great Goddess, her consort and her son, the latter two being often confused as when Horus of Edfou mates with Hathor of Denderah, while elsewhere Horus is the son of Isis or, alternatively, of Hathor: again, the epithet of 'Bull of his Mother' applied to Horus—'bull' having of course a procreative sense—may have arisen in very primitive times from a feature of the myth common to both regions, but surviving clearly only in Hither Asia where it is well exemplified in the story of Tammuz and Ishtar. The myth itself symbolized the course of agriculture from Spring to Spring: in Egypt the festival of the birth of the new Horus, according to Plutarch, was celebrated at the vernal equinox, combining doubtless with an ancient spring-festival which still survives in the modern *Shemm-el-nesim*. In Phoenicia the recently discovered texts show the goddess taking the form of a heifer before her mating, an interesting feature which relates her, it would seem, to the cow-goddess of Egypt, Hathor—afterwards Isis—and of Babylonia, Nin-khur-sag (see my article in *J.E.A.*, Vol. XV, pp. 38-9): a point of further interest is that for the act of procreation each goddess takes a totemic form, as falcon and heifer respectively.

The tale of the dismemberment of Osiris by Set has been generally accepted since Plutarch first told it, but there is no accusation of Set in the matter in the *Pyramid Texts* nor in the texts discussed in this paper. The former contain numberless spells to prevent the dismemberment of the dead king but no mention of Set in that connexion. In some early predynastic graves in Upper Egypt, the land of Set, evidence has been found of dismemberment of bodies of the dead, apparently for a second interment such as many primitive peoples practise; we may perhaps infer that the custom, peculiar to the Set people, was suppressed by the Osirians and the followers of the sun-cult and that the efforts needed to effect the suppression were such as to leave a strong mark in the books of spells. The texts concerning the Osiris festival, which are late, are similarly silent, only recording the gathering together of the limbs, as in the *Pyramid Texts*, and placing them ritually in the box. Some knowledge of these details and of the current spells, together with the explanations of half-ignorant natives, may well have supplied the bases for Plutarch's story, while the sixteen (or

fourteen) simultaneous Osirian festivals at the provincial centres of his worship may have originated the idea that Isis distributed to them the god's limbs or, at any rate, as Plutarch says, images of him (cf. Diodorus I, 20). As to other details, he was correct in placing the festival in Athyr, he was aware of the connexion of Osiris with corn, which he ridiculed (sec. 65) and that he ranked as king of the dead (sec. 79): he also knew that Set received worship—an unexpected turn in view of the many tales he records of his evil doings and character (sec. 30), but he was preoccupied with pseudo-philosophical ideas leading to all kinds of ratiocination about gods and religious matters in general, relying much on symbolism and allegory and on that well-worn staff, fanciful etymology: in such moulds as these he cast his ideas of Egyptian mythology, dominated much by a kind of Manichaeism, very evident, and somewhat vitiating, in his *Lives*. Those ideas have no intrinsic relation to the Osirian mysteries revealed in the texts; they are vague, with no sure outline, and it may even be doubted if he had real knowledge of any Osirian rites notwithstanding his addressing his correspondent, the Lady Klea, as a votary of them: was he, indeed, confusing his shadowy image with the Isiac ceremonies well known to Rome and Greece, in which, of course, Osiris had a part? Whatever rites were in his thoughts were of a Græcized character, as were those of Isis as described by Apuleius (*Metamorphoses*, bk. 11). In essence they differed totally from the real Egyptian rites: the latter were communal, their purpose being the assurance of prosperity for the whole country, while the rites imagined by Plutarch were of the classical Greek type, exemplified in the Eleusinian which had for their object the benefit of individual initiates, whether for a happy after-life or for ethical or even philosophical ends (see, for example, the "Homeric Hymn to Demeter," ll. 480-2, or Plato as quoted by Plutarch in his essay on "The Decline of Oracles," ch. 22—other passages are indicated in Frazer's edition of Ovid *Fasti*, vol. III, p. 297, n. 2). The communal purpose was of course the older: in fact, as recent researches have shown, it was the original object of the Eleusinian mysteries before the district was subjected to Athens and is clearly traceable in the later form of the rites in spite of their individual intent. The most remarkable feature established

by the recent excavations of F. Noack, published in 1927, was the Sacred Marriage acted, if only symbolically, by two hierophants (see *The Homeric Hymns* edited by Allen, Halliday and Sikes, 2nd ed., pp. 111, ff., especially p. 122; also Daremberg and Saglio's *Dict. des Antiquités Grecques et Romaines*, t. II, part i, p. 579). The excavations proved that nearly all the ceremony took place in the open, as it did in Crete, whence the rites appear to have been derived in Mycenaean times, and the built-in chambers on the site, used probably for initiation ceremonies, were of quite small extent. Crete was in constant contact with Hither Asia and thus Eleusis appears originally to have derived her mysteries from that region, which was, with Egypt, the great hearth of such rites. It was, then, very natural for the Greeks, discussing the rites of Isis, to confuse them with those of Demeter.

The moulding of the Græcized form must have been done at Alexandria for that city was the meeting-place of all kinds of men and religions: ancient ties were widely loosed and flux and change in religion very easy. Oriental rites were performed there publicly, as we know from the delightful 15th Idyll of Theocritus which describes the festival of Adonis—but it seems to have been little more than a magnificent public show, with its singing *prime donne*, and reflects well the light spirit of Alexandrian society. Through this medium would Egyptian religious matters reach Rome which for long past had been eager to accept all kinds of culture from Greece, and not Rome only but also its provinces, and thus the classical world adopted the Alexandrian version of Egyptian mysteries, founded on the ideal of individual salvation which prevailed at Eleusis and for which the world, with its ancient communal religions in a state of wreck, was now prepared.

One more feature remains for our inquiry, the *Manērōs* of Greek authors, who took it to be a song of lamentation; as such it has been dealt with in *The Golden Bough*, 3rd ed., part IV, vol. II, pp. 45, ff. The passage on which the author most relies is from Diodorus Siculus, I, 14, who says of Egyptian reapers that when they gather the first sheaf, those nearest it mourn and call on Isis: 'mourn' translates *κόπτεσθαι* which Frazer has somewhat over-emphasized with the phrase "beat their breasts and lament over." Now, as we have seen, the Isis-hymns were called

'Songs of the Mourners'; they embodied in fact a passionate cry to the loved one to return, beginning with the words: 'Come to thy house' and this is the very phrase which, according to good authority, was græcized into *Maneros*. Herodotus compares the song to the Greek *linos* of which we hear in the *Iliad* (xviii, lines 569, ff.) and which he says was a dirge for a youth who, excelling in music, was slain by the jealous Apollo, adding that it spread through all countries and in Egypt was called *maneros*. His account seems to have been generally accepted and copied by later authors, as was their wont—when therefore we find a tale constantly repeated by writers of various dates, we must not follow the Bellman and take a three-fold repetition for confirmation. Pausanias (bk. IX, ch. 29) follows Herodotus, but Athenaeus (*Deipnosophistæ*, bk. XIV, ch. 11), quoting an earlier author, connects the story of another unhappy youth of tradition, Bormos, who was drowned while drawing water for his thirsty reapers. Plutarch, however, while recognizing that the harvest songs were of a sad nature (secs. 70-1) and giving accounts of a lost youth much like those of his predecessors, departs from them in saying that the *maneros* was loudly sung at feasts and banquets and consisted of wishes for the company's prosperity (sec. 17).

The simple fact seems to be that the call of the Isis-hymns, magical in intention but expressed largely as love-songs, sometimes most impassioned, gained wide popularity, closely connected as it was with the well-being of the country, and, since that depended on agriculture, the call was specially popular with the peasants who made a custom of singing it at the first gathering in of harvest. The texts name these calls the songs of 'The Mourners,' a conventional epithet for Isis and Nephthys, and as such they were described to Herodotus and passed down to later writers. In short the song called *maneros* seems to resolve itself into an invocation for the return of good harvests.

What then becomes of the 'corn-spirit'? I will not venture a conclusion but submit an idea that in the corn itself was believed to reside an element of good luck or even 'power' or *mana* such as Marett has suggested may pertain even to inanimate objects. To Arthur Waley I owe the information that the Chinese word *tê*, usually translated as 'virtue'—but the ethical sense

developed quite late—conveys the same idea of power or 'good luck' residing in things, comparable to the Indian *shakti*. The last sheaf, he adds, is preserved in China on account of its *tê* and here we may perhaps find an explanation of the folk-lore of last sheaves in general, of the plaited ears of corn hung up for the year's luck by Egyptians, ancient and modern alike, (see Miss W. Blackman, *The Fellâhîn of Upper Egypt*, pp. 307-9), of the wreathes kept by modern Greeks in their houses for the same purpose or the twigs and flowers blessed in Italy by priests who bring them round to their parishioners' houses, and so on.

A most characteristic example of this kind of folk-custom is to be seen among the Torguts of Inner Mongolia who, as Dr. Göste Montell has told us, attribute to articles belonging to them a kind of favouring virtue called *buyen* which they endeavour to preserve for their benefit even when the articles have left them; for example, on selling a camel a bunch of its hair is pulled out, rubbed against the animal's nose and then tied to an inner rope of the tent; similarly, if clothes are parted with, some threads from them or even a button are preserved. Dr. Ethel Lindgren has kindly given me the following information concerning the Tunguses of Eastern Siberia with whom she is familiar: they have a household god, *Jol*, whose representation they hang up in their dwellings in the form of a leather plaque on which are two heads made of plaited horse-hair; hanging from them is an appendage of hairs taken from all the animals that they have sold. The translations that she has given, from Mongolian and Kalmuk dictionaries, show that the word *buyen* is closely allied in meaning, as might be expected, to the Chinese *tê*. These practices have probably many parallels which, if collated and analyzed, would lead to explanations of popular customs and religious practices hitherto unexplained or, at best, obscure. (For further light on *tê* consult Waley, *The Way and its Power*, pp. 21, 27, 31 and *passim*).

Besides this matter of 'luck' there exists of course the purely animistic outlook which places food-plants under the protection of special deities. Of these South America yields excellent examples, for there maize, potatoes and coca each had their *mama* goddess who must be placated if good crops were desired (see Redcliffe Salaman on 'The Potato in its early Home' in the *J. of*

the *R. Horticultural Soc.*, vol. LXII, parts 2, 3, 4 and 6, especially pp. 122-3 and 153-6). Egypt had her harvest-goddess, Ernûtet, whose primitive functions must have been similar, but, just as the Nile-god Hapi was superseded by Osiris, so her powers became quite secondary as against

those of the royal Horus who with the co-operation of his parents, the Flood-god Osiris and Isis, the Great Mother and Magician, ruled all things in Egypt, though, when Solar theology gained ascendancy, he was made subject to it, officially, and became the 'son of Rê.'

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Australian Social Organization. *Summary of a*
201 *Communication presented by Professor A. R.*
Radcliffe-Brown, M.A., 19 October, 1937.

The greatest advance that has been made in social anthropology in the twentieth century has been the improvement in method in the intensive study of single communities. There is another and equally important task which has received very much less attention, namely, the improvement of the methods by which we compare societies with one another. Some of the problems of the comparative method may be illustrated by reference to the discussions of anthropologists about the social organization of Australian tribes.

In the nineteenth century there was a lengthy discussion of Australian social organization by Sir James Frazer, Andrew Lang, Hartland, Durkheim, Father Schmidt, N. W. Thomas, Howitt and others. It was generally assumed by every one that the purpose of comparisons of the various forms of social organization should be to arrange them in an order of development, or in some way to arrive at a conjectural history.

My own conception of the purpose of comparison is different from this. Our aim should be to determine

as exactly as possible the resemblances and the differences between all the tribes about which we have knowledge in order to discover, by a process of abstraction, the general, not immediately obvious, similarities which underlie the superficial differences. We are thus enabled to separate what is universal, permanent, essential or dominant in Australian society from the accidental features presented in particular tribes.

Australia affords an exceptionally valuable field for this method of comparison, because there is one general type throughout the continent exhibited in a great number of variants. When we attempt to apply a similar method to the tribes of North America we meet with a number of complex and difficult problems and are hampered also by the serious deficiencies in the recorded information on social organization.

The various studies of Australian tribes that have now been made (some not yet published) enable us to define with some assurance certain of the essential features of the general Australian type. As similar comparative studies are carried out in other regions it will be possible to proceed to compare types one with another.

REVIEWS.

PHYSICAL ANTHROPOLOGY.

Rasse und Krankheit. *By Johannes Schottky.*
202 *Munich : J. F. Lehmanns, 1937. xv + 468 pp.,*
78 illustrations. 21.60 Marks.

This book is the work of sixteen collaborators, one of whom, Dr. J. Schottky, not only acts as editor but contributes three sections or chapters, an introductory one dealing with race and disease in its general aspects in which he describes the history, scope and methods of the subject and two others on race and mental diseases and race and feeble-mindedness and the psychopathies. The other authors are responsible for sections under the following headings: race physiology, race and internal diseases, race and infectious diseases, race and tropical diseases, race and skin diseases, race and diseases of the nervous system, race and metalues (tabes dorsalis and general paralysis), race and surgery, race and eye diseases (followed by a subsection dealing with an eye surgeon's observations in North China), race and diseases of women and obstetric conditions, race and ear, nose and throat diseases, race and dental disease, race and malignant disease and race mixture and disease. To each section is appended a fairly extensive bibliography and at the end of the volume are name and subject indices.

The book seems to deal adequately with the aspects of the subject that are discussed. The information provided is not only comprehensive but valuable and includes references to recent developments. Probably on account of the comparative homogeneity of our population but little work on the subject of a possible relationship between racial type and prevalence of disease in its different forms has been attempted in this country, but the more important contributions on the subject have been referred to in the book.

The contributors have endeavoured in so far as was possible only to include material with a sound scientific basis and to omit what appeared on examination to be merely unproven speculation.

The book should provide the means whereby an anthropologist or physician intending to go abroad can before doing so make himself familiar with the main facts known about the relationship between the racial types and predisposition to particular diseases in the land to which he emigrates. It is to be hoped that the book will arouse more interest in the problem of race and disease and stimulate further research in some of the aspects of the subject in regard to which, unfortunately, there still remain many gaps in our knowledge. M. Y.

Antropologia e etnografia delle genti della Somalia.
203 Vol. III. *Etnografia e paletnologia.* By Nello Puccioni. 10½ × 7½. Bologna (Nicola Zanichelli). 1936. 140 pp and 15 plates. Price 60 lire.

This volume published under the auspices of the Royal Italian Geographical Society forms part of the scientific publications of the Stefanini-Paoli (1913) and Stefanini-Puccioni (1924) expeditions to Somaliland. The two previous anthropological volumes (for the expeditions have also published geographical studies) dealt with measurements on the living and on crania. In the volume before us we have a careful account of the material and to a lesser extent the non-material culture of the people of Somaliland. Various examples of their craftsmanship are illustrated by admirable photographs. The second part of this volume gives an account of palæolithic industries in the region together with tables of the distribution and also a map of the various sites.

L. H. D. B.

Antropometria delle genti della Cirenaica. By Nello Puccioni. Firenze (Felice le Monnier). **204** 1936. 2 vols. 10½ × 7½. 550 and 250 pp., maps and 184 plates. 150 lire.

This magnificent work, which is an official publication of the Government of the Cyrenaica and is the result of an anthropological expedition in the years 1928-1929, is an important contribution to our knowledge of the anthropology of North Africa. The people of the Cyrenaica have interested the world ever since stories about the 'fair Libyans' became part of the general knowledge of educated persons. We have had in the past, apart from occasional papers, the volumes of Bertholon and Chantre for Tripolitania and, of course, more work has been done on Egypt than probably on any other country; but, though a little has been written, the Cyrenaica has, on the whole, been little known from the point of view of the physical anthropologist. The present author has done much to remedy this defect. He has divided his material into two major groups: first the Berber-Arabs, subdivided into three main tribal divisions el Harabi, of which he measured 307 males

and 37 females, Baraghits, 161 males measured and 32 females, and Marabutiche (I follow his spelling), 280 males and 12 females: his second major group includes 91 male and 8 female members of Sudanic tribes measured at Essabri. Here we obviously have, except possibly in the last group which includes some individuals from widely scattered areas, a series which lacks little in numbers. The author has further divided them up into sub-groups, a division which is no doubt justified on cultural grounds but which does in practice necessitate a number of series based on numbers which in some cases would appear to be statistically insufficient. A large number of measurements and morphological observations were made on each individual and these are set in frequency distributions which are given both as absolute figures and also in percentages. In the latter case one may perhaps wonder whether when a group contains less than twenty individuals such percentages are of any real value. In addition the ordinary biometric constants have been worked out. The distributions of various characters usually on a percentage basis and, in addition, some of variabilities, are also plotted on outline maps. Volume 2 gives in addition tables of individual measurements and a large number of photographs. Each character is further discussed in detail.

At first sight such an arrangement would suggest that it might be difficult to see the wood for the trees, this is, however, far from being the case. The student who wishes to make use of the material will find all this vast mass very easy to work through, even though we only give a table of contents and not an index; further, whatever method you may wish to use, whether you prefer raw frequencies, means and standard deviations, or percentages, they are all at your disposal as well as the individual measurements. The physical anthropology of Africa is yet to be written, but a book of this type will lessen very considerably the gaps which exist in certain areas and the author is to be congratulated in the thoroughness as well as in the lucidity of his presentation of so great a mass of anthropometric data.

L. H. D. B.

ARCHÆOLOGY.

Ekade Ektab, die Felsbilder Fezzans. By Leo Frobenius. Leipzig: Harrassowitz. 1937. **205** xix+73 pp., 91 plates. 30 RM.

The rock shelter art in North Africa has intrigued prehistorians for many years and there is a considerable literature on the subject both in English, French and German. It has been claimed that many of the engravings date back to palæolithic times and as proof of this figures of animals now extinct have been cited. On the other hand, it has been urged that where camels are drawn the art must be very modern, this animal being Asiatic in origin and having been introduced by the Persians into Africa. This contention has recently been denied, but none the less the palæolithic age of most of the engravings has not necessarily found acceptance. Possibly the desert areas in North Africa, where much of this art has been found, were fertile in late Pleistocene and immediately post-Pleistocene times, and what is now desert may then have been inhabited country. Early Saharan pottery that must date back many thousands of years B.C. occurs over a very wide area indeed and seems to be very uniform. It may be that the solution of the cultural connexions and age of much of this North African art will only be arrived at when more is known about these hypothetical early Saharan cultures. However, any information as to this North African rock shelter art is, of course, welcome, and Dr. Frobenius's new book with its wealth of illustrations

(no less than ninety-one full-page plates) is, naturally, very useful. The area under review can be readily found on Pl. 69 of "The Times Atlas," close to where longitude 15 E. cuts latitude 25 N.

The difficulty of reproduction is always considerable and with all the best will in the world where engravings have to be chalked before they are photographed a certain personal element cannot fail to enter into the proceeding. Doubtless Dr. Frobenius himself took a number of photographs before this chalking was begun, and it is a pity that it was not found possible to include more unchalked reproductions. At the same time every explorer knows that to get any result in this connexion the photos must be taken at the right time of day and in the right light, and it is not always easy to be present just when the conditions are satisfactory.

Dr. Frobenius distinguishes an aboriginal style when wild animals only are figured, these occupying prominent positions at the sites. A second style is due, he thinks, to an invading people from slightly eastwards, who figured domestic animals, placing them of necessity in the less prominent positions on the walls. He is inclined to class the first style as truly palæolithic and to connect it, I should have thought somewhat rashly, with the Franco-Cantabrian art-groups of the caves, while the art of the second style he connects with that of eastern Spain and South Africa. Certain paintings are included among the engravings but seem to be rare. However,

a little to the west in the Tazili hills a number have been discovered and to me these are of special interest in view of the striking similarity which some of them bear to the amazing group of figures at "Impey's Cave," near Fort Victoria, in Southern Rhodesia. Dr. Impey always claimed that these were Egyptian, and though his claims were disallowed the paintings admittedly did form a very inexplicable group. And now, 10 years after the Impey Cave discussion died down, here we have almost identical figures which can be seen on Pl. LXXXI from Ido. There is little doubt, I think, that the South African art group as a whole and that of North Africa must be connected. Probably the increasing drying-up of the area drove the inhabitants to migrate and all information that can anyhow be extracted from these to-day inhospitable regions is very welcome to prehistorians, who must therefore be grateful to Dr. Frobenius for what he has done.

M. C. BURKITT.

The Palace of Minos at Knossos : Index Volume. By Dr. Joan Evans. London : Macmillan & Co., 1936. vi + 221 pp. Price 31s. 6d.

This volume forms the coping-stone of Sir Arthur Evans' monumental work on Cretan civilization, described round the framework of his own excavations at Knossos, the most important of the Cretan sites. Without a full index the scholar would have found difficulty in using the work, which, though so written that no one would grudge reading it through again and again, yet also contains such a storehouse of facts that it ranks as the encyclopædia of Cretan civilization.

The volume contains a single index, in which personal names, place-names and subject-matter are catalogued together. The multiplication of indices makes consultation the more difficult, and as every heading contains a few words of analysis, no saving of space would have been effected by a separate topographical index. Thus, so far as is possible, this index enables the reader to find, without delay and without hunting through a mass of irrelevant references, the passage which he is seeking.

It might have been wise to index as far as possible with cross-references all the page-headings and illustration-captions, some of which find no mention under any of the key-words, as many general readers would remember these better than the text. There is no table of text-illustrations in any of the volumes, and a list of illustrations is as difficult to wade through as a table of contents, and needs indexing. It would be better to refer to every illustration specifically in the general index. There ought further to have been more cross-references, and occasionally an object is entered only under one heading instead of two: for instance, under *Ingots* there is a reference to one from Ras-Shamra, but this is omitted under the place-name. But one must not criticize harshly such a valuable aid to scholarship, which accentuates to the value of the book which it accompanies.

OLIVER DAVIES.

Preistoriska Vinča IV: Keramika. By Miloje M. Vasić. Belgrad, 1936. xvi + 172 pp., 77 pl. with 242 fig. and many in text.

Volume I of this work was noticed in MAN, 1933, 186, II and III, MAN, 1937, 80: IV gives further illustrations of the Ceramics on the same lavish scale, and with an elaborate description of each piece. There are two appendices—I, a comparison between Vinča and Berezán', the early Ionic settlement on an island off the mouth of the Dnepr. and II, on the fish-hooks and harpoons illustrated by Pl. lxxvii, also available in

French in the *R. Internat. des Ét. Balkaniques*, iii (1936) 83. With regard to the work as a whole I have nothing to change in my view expressed in former notices. Professor Vasić compares Vinča with Berezán' regarding both as settlements of Ionians about the seventh century B.C.; yet in Berezán' any amount of the typical Ionian decorated ware has been found, whereas Vinča has not yielded one sherd, and all its analogies are with the neolithic settlements of Bulgaria and Rumania.

ELLIS H. MINNS.

The Archaeology of Sussex. By E. Cecil Curwen. ('The County Archaeologies,' edited by T. D. Kendrick, F.S.A., No. 8.) London : Methuen, 1937. Crown 8vo. xviii + 338 pp., 32 plates. 89 text illustrations. Price 12s. 6d.

The resumption of the County Archaeologies series with a volume on Sussex should be welcomed by a large and diverse band of readers. The Editor has been fortunate in securing an author in Dr. Curwen, who has lived most of his life there and knows and loves every mile as few others have even of that much known and much loved county. But his qualifications are far greater than that alone would imply, for he has devoted the spare time of 24 years, following and together with his father, to the archaeology of prehistoric and Roman times. His first book, *Prehistoric Sussex*, appeared in 1929, and since then, as before, with an ever-growing band of supporters, he has pursued the unremitting course of excavation and field-work which since the war has transformed our knowledge of three thousand years of human settlement. The 'open-air' side of the subject, healthily dominant in the first book, has here not only been more fully exploited, but also admirably supplemented by comparative research covering a full range of archaeological method and interpretation. And the result is an eminently straightforward and readable book.

It is safe to say that it will be read by everyone interested in the prehistory anyhow of Southern Britain. A reviewer for MAN may perhaps go further and recommend it, modestly but with confidence, to anthropologists for whom British prehistory and the archaeological approach are not habitually a prime concern. There are several reasons for this suggestion. Firstly, the well-marked and familiar geographical features of the Weald, the South Downs, and the coastal plain make Sussex an excellent field for observing the relationships between early man and his physical environment. Secondly and conformably, the great preponderance of the Downs and the coast in the tale of human settlement, together with the wonderful capacity of chalk country for the preservation of its remains, has enabled the intensive exploration here summarized to present a picture far closer to effective completeness than is usually possible in the present state of British archaeology. Thirdly, by reason largely of its Continental accessibility and the resistance offered by its Wealden hinterland to cultural backwash and disturbing survival, the sequence of prehistoric cultures in Sussex is, on the whole, clear-cut and innocent of such conflation and confusions as may often drive an archaeologist rather to technical obscurities than to generally intelligible direct contributions to the study of man. Certainly Dr. Curwen is guiltless of such avoidance. He uses his archaeology throughout as a vehicle of approach to the social and economic life of human beings.

Fourthly, this book may perhaps help to mark a stage in the advance of British prehistoric studies when ethnographic comparison may return to a more useful place in their equipment. That the weighty pioneering of General Pitt-Rivers appears in this regard as yet so

sparsely followed is not the fault of ethnography nor of ethnographers. It is due to the immaturity of prehistory. Only now are we witnessing the establishment of an adequate serial chronology, and the complementary achievement of something like working completeness in the survey of certain favoured regions, of which Sussex is one. Without these two essential axes for plotting the curves of human activity, it is useless to invite the ethnographic contribution. But once we know, for example, that flint-mining on the English chalk is no affair of scores of thousands of years beginning in Palaeolithic times, but a well-defined industry practised from Neolithic A to the Middle Bronze Age, then its relationship, as a specialized and localized business of wide economic potential, to the pattern of partly agricultural but mainly pastoral society in which it was carried on, becomes a clear case for anthropological attention. Further, the coincidence between its decrease and the rise of large-scale bronze metallurgy attested in the founders' hoards of the Late Bronze Age, invites the study of an industrial revolution which replaced the chalk-bound flint-miner serving possibly distant customers by the itinerant tinker, serving sedentary farming populations with the products of raw material mined in the distant west. That revolution, one may add, has often been ascribed to invasions or immigrations of agricultural Celts from abroad, which were formerly regarded as a process in which 'fusion' with the older inhabitants must be most marked at the outset (*e.g.*, in the survival of the old palstave side by side with the new socketed axes, and in so-called 'transitional' forms of pottery urns). But it seems now that the industrial revolution with its socketed axes came first, and was a mainly economic event accompanied by very little settlement, and showing yet no contacts with the natives, while the mass immigration of Celtic farming peoples only came several centuries later; only with them do we get pottery which in form and ornament implies 'fusion' with native craft traditions, and as for the 'old' palstave, it is this period which is to a great extent its proper chronological horizon. This matter of 'fusion' calls aloud for discussion with anthropologists.

Again, in dealing with the Iron Age, of which he shows especial mastery, Dr. Curwen argues that the dwellers in the fortified hill-towns lived mainly by trading simple manufactured goods for the farm products of the countryside. This wholly new suggestion, most interesting anthropologically, could not have been made but for the author's exhaustive knowledge of the lynchet-systems of the Sussex Downs, which has revealed that whereas Iron Age hamlets and villages are consistently surrounded by contemporary fields, Iron Age towns are not. And for study of the degree of shift to the coastal plain inaugurated by the Belgic and consolidated after the Roman conquest, of the development of the Wealden iron industry, and of the whole social and economic geography of the Roman period, Dr. Curwen's well-mapped array of archaeological facts should appeal to the anthropologist no less than to the historian.

One criticism only need be outlined here. It is a dangerous *argumentum e silentio* to say that the Late Bronze Age invaders must have brought in the 'Celtic' system of agriculture in small square fields. We know nothing whatever about the fields of the preceding periods in Sussex. And since the earlier growth of this type of agriculture may be sought over many and wide regions of Western and North-western Europe, it is unwise to deny what may in truth only be undetected. Further, the 'Celtic' system itself frequently displays long strip lynchets which cannot simply be explained away by supposing the disappearance of cross-banks dividing them up into squares. The fact that a more advanced system of strip cultivation, employing a heavy plough on lowland rather than downland soils was introduced by the Belgae, developed under Roman rule, and thereafter reintroduced in a fresh form by the Saxons, does nothing to minimize the existence of strip-fields as well as square ones on the 'Celtic' type of farm. It may well be these that were introduced by the Late Bronze Age invaders, to diversify an existing square-field tradition. To this extent the author's otherwise faultless account of early agriculture in Sussex requires modification.

The publishers have done their utmost to reconcile the rather dumpy format of their series with the claims of adequate illustration, and the many exquisite drawings by Mr. Robert Gurd, as well as the high standard of the half-tone plates (which include some excellent air-photographs and many good ground views by Dr. Curwen himself), are a most satisfactory feature. For their sake, the omission of a Saxon chapter and of the usual *Archaeological Gazetteer* was well worth while, and the book is far from dear at twelve shillings and sixpence. May it have many worthy successors.

C. F. C. HAWKES.

A New Archaeological Map showing the distribution of Prehistoric Paintings and Engravings in South Africa. *Compiled by C. van Riet Lowe, South African Director of the Bureau of Archaeology.*

Professor Van Riet Lowe has recently published and distributed widely a map of the Union of South Africa showing where such archaeological sites as painted rock-shelters and rock-engravings occur. The inhabitants in the various districts are invited to let him know the location of any further sites not hitherto listed. He writes to me that the response to this invitation has been most satisfactory. We expected that when Professor Lowe accepted the Directorship of the Bureau of Archaeology he would make things 'hum' and he has certainly done so. He is to be congratulated especially on this new venture. The experiment is one which could with advantage be followed in other countries which are, archaeologically speaking, little explored, and where the state of archaeological knowledge is still such that the ordinary non-expert can usefully indicate the kind of site he has found on his land without needing to state exactly what particular sub-sub-sub-division of a culture is present.

M. C. B.

SOCIOLOGY.

Studies of Family Living in the United States and other Countries: An Analysis of Material and Method. *By Faith M. Williams and Carl C. Zimmerman. Washington, D.C., 1935. 617 pp. Price 60 cents.*

The main part of this publication of the United States Department of Agriculture is an annotated bibliography

of studies of family living produced in different countries: the United States, most of the European nations, and several Asian and African. The bibliography for North American studies is considerably the fullest, probably because workers there have specialized in this kind of sociology. In a brief introduction the authors trace the history of family studies and describe in turn the

methods of Le Play and Engel. Some of the theories of the statistical school are queried both here and in the body of the work. At the end an analysis is made of the material collected in Canada and the United States, and an index of authors is provided. Approximately 1,500 studies of family living in 52 countries are included; but, as the authors are aware, the differences of technique make comparison difficult. Useful as the work may be, the amount of labour involved hardly seems justified, so unequal is the age, importance and soundness of the works classified.

A. B. V. D.

Changing Views on Marriage and Family (Hindu Youth). By K. T. Merchant. Madras (B. G. Paul), 1935. 292 pp. Price, Rs. 3-8-0.

Scientific investigations into current problems of Indian sociology are few, and this book is therefore a useful contribution. Adopting the questionnaire method, the author has tried to ascertain the views of educated Hindu young people of both sexes (mainly in the Bombay Presidency) on such topics as marriage, betrothal, the joint family system, and birth control. As Professor Ginsberg points out in the Preface, questionnaires on such complex and subtle matters as attitudes and changes in family life have obvious

defects. But the treatment is reasoned and skilful, the author does not obtrude his own preconceptions, and gives his conclusions with restraint. From the six hundred answers he received he has been able to point to some apparently significant trends of view. Thus while in the betrothals and marriages studied from Bombay and Gujarat more than half the parties were united by their families without obtaining their consent the majority of these people wrote in favour of allowing individual choice in marriage and of marrying later in life. There are also interesting local differences. Thus while the disintegration of the joint family is common knowledge it appears from this investigation that the process has gone further in Gujarat than in Bombay. Many of those consulted regarded the joint family with disfavour, though some supported it on the grounds of its economic advantages and the training it gives in social responsibility. Colour is given to the statistical inquiry by reproducing a selection of the comments received. Some of these are of interest, but many are so general as to be of little value. In his concluding chapter the author argues for the necessity of freeing Hindu marriage from its religious ties, a freer system of divorce and a substantial spread of education.

RAYMOND FIRTH.

BIOGRAPHY.

Tylor. By Dr. R. R. Marett. ('Modern Sociologists', edited by M. Ginsberg and A. Farquharson.) London: Chapman & Hall. Price 6s.

Anthropologists must be grateful to the editors of *Modern Sociologists* for including a sketch of Tylor's life and work among their studies of the pioneers of sociology. At a time when the scope and methods of anthropology are changing rapidly, Dr. Marett's book is opportune. As 'the Study of Man' anthropological science must constantly adjust its frontiers with kindred disciplines, such as Biology, Sociology, or Psychology; but the relation between the anthropology of the university curriculum and the main body of the social sciences is particularly interesting at the present time. The old hard and fast line between primitive and modern societies is tending to disappear. Sociologist and anthropologist draw on the same material. Tylor, therefore, as the founder of social anthropology proper, has become a significant figure.

Dr. Marett writes with personal knowledge and gives a charming description of this Quaker scholar, "hand-some as a Greek god, gentle as a Christian, penetrating as a scientist," who created Oxford anthropology between 1884 and 1909. Many students to whom Tylor is only a name in the introductory chapters of textbooks may be inspired by this account to read *Primitive Culture* for the first time.

But the book has a further interest. The life of Tylor coincides almost exactly with the birth of anthropology as a science, and it is this moment which Marett so vividly describes. He shows us Tylor in the setting of his age, caught in the ferment of the evolutionary movement which has influenced so profoundly the whole subsequent development of sociological science. Anthropology, as Marett has said elsewhere, is the study of "Man in evolution," and, apart from the work of Darwin, Huxley and Lyell, the alliance of ethnology with archaeology, physical anthropology and race studies might seem incomprehensible to the student of to-day. As knowledge accumulates and specialization proceeds, it is wholesome to pause and consider the original scope of anthropological science and the impetus behind it.

Tylor's actual contributions to anthropological theory Marett describes under the separate headings of language, mythology, religion, magic, ritual and society. The chapters on religion are particularly full, and the author gives us an outline of his own theory of 'pre-animism' while describing the 'animism' of his predecessor. Throughout, Dr. Marett contrives to give us a picture of the slow building up of a science by empirical methods, and of the vast mass of material which Tylor handled, often for the first time. In fact it is interesting now to study the almost random way in which the scope of ethnology was first fixed.

Tylor recognized the unity of all mankind in times prehistoric and modern, no mean feat in those days. He was constantly concerned to prove the rationality of many savage customs, and their universal basis. With these larger unities he seemed content to rest, tackling other problems piecemeal, resolving, as his biographer puts it, "to enter and blaze a trail just wherever it seems feasible." We see him fascinated by archaeological discoveries in Mexico, forming a theory of linguistics at the Deaf and Dumb Institute in Berlin, arranging material in the Pitt-Rivers Museum, and demonstrating the use of fire sticks which would not work until Tyndall had surreptitiously added the head of a lucifer match! 'Some remarkable customs' is the heading of one of Tylor's chapters, and this delight in amassing strange facts—probably an incidental stage in the development of any science—Dr. Marett very successfully conveys.

If the book is disappointing, it is not as a life of Tylor, but as an estimate of the relation between early anthropological methods and the technique of the social sciences of the present day. Modern ethnological field-work, and developments in psychology, experimental and clinical, have revolutionized the whole anthropological outlook since Tylor's day, and an estimate of these changes and of the consequent present position of anthropology in relation to sociology proper would have been exceedingly useful to the general student. It is to be hoped that the editors have a further volume of this kind in preparation.

A. I. RICHARDS.

CORRESPONDENCE.

The Atagara of Idah on the Niger.

213 SIR.—In the *Journal of the Royal Anthropological Institute*, LXVI, pp. 393-435, Mr. Miles Clifford contributes an interesting and informative article on the Igara or Igala of Idah: and their 'Ata' or Chief, the Ata-gala or Atagara.

On page 411 Mr. Clifford alludes to the custom of the 'Royal Interpreter' sitting with his back to the Ata. He explains the custom as perhaps due to a time when the Ata was a stranger and could not speak the local vernacular. But the position of the *N'gal-ti-ma* (Galladima) in Bornu, who also sat with his back to the Mai hidden in the case which is illustrated (from Denham and Clapperton's travels) in Palmer's *The Bornu Sahara and Sudan* (London, Murray, 1936, p. 223) suggests that the Idah custom was due rather to the 'divinity' of the Ata than to any linguistic difficulties. The *N'gal-ti-ma* of Bornu was the ruler of (*ma*) the land (*ti*) of the N'gala. In some ways his position in old Bornu was not dissimilar to that of the *Ashadu* at Idah. He was the representative of the N'gala or subject non-Barbar peoples.

On the other hand, the ceremonial marriage of the Ata-elect (*Ashukanya*) to the *Ashadu* as representing the Igala, and the fact that the Atas of Idah acquired their nobility through a Jukun ancestress, Ebele Ejaumu, who married a slave as the first *Ashadu*, shows that, as in the case of Bornu, and the Tuareg, the right of succession to the kingship at Idah, was regarded as passing through females rather than males or in other words that nobility was, as in the Sahara, derived from females, the Ara representing the 'divine life' which ruled the Igala subject peoples of servile ancestry, just as does the *Amanokel* among the Tuareg, and did formerly the *Mai* (Mek) of Bornu as representing a female ancestress the *Makila* (Makeda of Abyssinia) analogous to the *Maqira* (Queen Mother) of Bornu and the *Kintikit* (Candace) of Meroe.

With regard to the differences between Idah and the Jukun Kingdom (*J.R.A.I.*, LXVI, p. 416), though no doubt due directly in some measure to the influence of Benin on the former, they must indirectly have been due in part to the differences between the ancient Kingdoms known respectively as Kukia, on the Niger, and Bornu. The former, Kukia, must necessarily have influenced considerably the early cultural atmosphere of Nupe as well as Benin and Yoruba—deriving its 10th-12th century pre-eminence, partly from North African and Jewish trading influences, but mainly for the pre Tuareg Sahara stocks known as Zaghawa.

The Jukun on the other hand, at a rather later date, came West from Baghermi and perhaps further East into the Gongila valley via the Logone-Shari region, by which time the Maghumi of Bornu, who were of Tuareg affinity, had become dominant in Kanem and Chad.

On page 430 Mr. Clifford supplies a diagram of the Ata Gala's tomb, with its canoe-shaped coffin designed for the 'last journey,' as were the representations of 'boats' on Egyptian tombs.

It may not be recorded that the Sheikhs of Bornu were carried on their 'last journey' to burial in a canoe (*komi*), and that until recently at any rate such a burial-canoe could be seen at the tombs of the Sheikhs of Kukawa. As this custom was clearly not Islamic, the inference is that it was a custom inherited by the Kuburi Sheikhs from the Maghumi Mais of Bornu, who, as may be seen from the legends concerning the burial place of Mai Biyoma the 7th legendary Mai of Kanem circa 900 A.D., Palmer: *The Bornu Sahara and Sudan*

(London, Murray, 1936), p. 128, were buried in a manner not dissimilar to the Atas of Idah and the Atas or Abu Ukas of the Jukun.

The name of the Jukun supreme-god Ama—described at length by Dr. C. K. Meek: *A Sudanese Kingdom*, p. 178 ff., is cognate to the names *Mani*, *Mune*, *Ume*, or *Unayi*, which in ancient Bornu and Wadai stood not only for the King (*Mai*) but the same god who at Thebes in Egypt was called Amon, and Amune at Meroe—a god who was peculiarly the god of Nubia, and whose 'sacred bark' was constructed and kept at Thebes towards 1313 B.C. by Seti I. (Breasted: *History of Egypt*, p. 410.)

Even now among certain tribes of Jukun affinity in the Gongila region, a local priest by announcing that he is possessed by *Ama* can turn a village chief off his bed (throne) and mount it in his place. Thus the cultural connexion between Idah and the Jukun, between the Jukun and ancient Bornu, and between the Maghumi of Bornu and ancient Meroe, makes it very probable that the burial-canoe of the Atas was ultimately desired for the 'bark of Amon.'

Connecting links are so numerous and evident to-day in the regions stretching from the Benue to Darfur that it can hardly be doubted that *Ama* of the Jukun was originally 'Amon of Thebes.' H. R. PALMER.

Myth and Ritual. A Reply to Mr. Hocart. (Cf. MAN, 1937, 170.)

214 SIR.—Mr. Hocart attacks me with his usual wit and vigour. I ask leave to reply as follows to his nine points.

1. I certainly suppose that Homer thought the *Iliad* to be founded on facts, in other words that he believed the Trojan War to have taken place and that persons named Agamemnon, Achilles and so forth took a prominent part in it. It does not follow that no details of the *Iliad* were invented by him or taken over from a source (for example, an older poem) which he did not regard as historical. For

2. If a man believes a story true, then it is true for him. That is to say, he will not feel at liberty to alter its main events, however much he may let his imagination play with the details. Compare the treatment of Satan's relations to God by Milton, who believed the orthodox account, and Anatole France, who did not. Homer would not have composed an *Iliad* on the assumption that the Trojans won the war, nor an *Odyssey* in which the hero was drowned at sea. But it does not follow that the Wrath of Achilles or the description of Kalypso's island was part of his *depositum fidei*.

3. If Homer or any other ancient believed a thing real which we do not accept as such, that is a matter of historical criticism and not of the classification of legends. No one now supposes that Jason took his ship between clashing rocks or was helped by a witch to perform impossible tasks; it remains none the less a perfectly tenable theory that Jason was a real Minyan chieftain who went on a prehistoric Viking raid.

4. I suppose that Homer composed the *Iliad* about the tenth century B.C., and that the Trojan War was fought about the beginning of the twelfth century. The interval is by no means too long for true recollection to survive among noble families, especially in a people which probably had some knowledge of writing.

5. I suppose that the Homeric Greeks had minds very like ours, and therefore that in an imaginative handling of real events they were capable of introducing the activities of gods and other beings whom they did or

did not regard as fabulous, or even of characters invented by themselves on the analogy of real or supposedly real beings. Thackeray did much the same when he killed his imaginary George Osborne at the perfectly historical Battle of Waterloo, and Michael Arlen, when he made one of his characters in *The Loquacious Lady of Lansdowne Passage* meet a ghost near the solid and actual Devonshire House. It never entered my head to fancy that any epic poet thought he was writing unadorned history.

6. I suppose Greek myths to have had somewhat varied origins, but see no evidence that any of them are 'pre-Minoan or Indian.' In any case, I was not dealing with myths but with sagas.

7, 8. I do not imagine that we know "every Greek ritual that ever was," but hold that if anyone supposes a ritual, Greek or other, to explain a myth, Greek or other, the burden of proof that there ever was such a ritual and that the framer of the myth could have been directly or indirectly affected by it, lies on him. That a myth may live when its ritual is forgotten or beyond the region where that ritual was practised is a commonplace; what I object to is the production of rituals from the empty air, without any indication of how they could, supposing them to have existed, have influenced the myth-makers in question.

9. If a 'mythical plot or episode' is under discussion, I want proof (a) that it really is mythical and does not belong to *marchen* or saga, (b) that a corresponding ritual, in a possible neighbourhood to produce the myth in question, be shown reasonably likely to have existed. To take the example Mr. Hocart quotes, of the birth of men from stones, I do not see any likely connexion between such rites as he briefly mentions in his *Progress of Man*, p. 149ff., still less between the extraordinary jumble of alleged Phœnician mythology and undoubted Greek Euhemerism which Eusebius, *Praep. Evang.*, i, 10, 16 sqq., quotes from Philon of Byblos, and the story of the Flood and its consequences.

My attitude towards hypotheses is, I think, exactly the same as his; but before adopting one, however provisionally, I ask that it should involve no great and unproved assumptions, as the theory that practically all traditional stories are the offspring of ritual seems to me to do at every turn.

H. J. ROSE.

The Fire-Piston in South India. (Cf. MAN, 1935, 112; 1936, 93; 1937, 169.)

215 SIR,—In MAN, 1937, 169, Mr. Raghavan writes about his discovery of a little paddy husk from within the iron object figured by him, MAN, 1935, 112. The presence of paddy-husk alone (excepting so far as it denotes that rice was cultivated by the ancient people of Adichanallur and amply borne out by the presence of a large number of agricultural implements among the Adichanallur antiquities) is not enough to identify the object as a fire-piston. One would like to know the shape of the piston, whether it has any cup-like depression at its end, and whether there are any traces of combustion or burnt paddy-husks in the cylinder itself, before a definite conclusion can be reached.

It appears somewhat strange that paddy husks should have been used in producing fire in a fire-piston, as the husks are granular and flake-like and will make a compact mass when inserted into the end of the piston, unlike the soft compressible mass of cotton or vegetable floss. The double purpose of the object also seems somewhat doubtful. The fire cannot be alive when the tight-fitting piston is within the cylinder, and it is too small an object to store household fire.

Bose Research Institute, Calcutta.

S. S. SARKAR.

Fire-Piston or Pestle? (Cf. MAN, 1937, 169.)

216 SIR,—Mr. Raghavan would wish too easily to persuade us that his objects from Adichanallur, identified by him as fire-pistons, but—as many of us will suppose—more correctly identified by Mr. Sarkar as pestles and mortars, really are fire-pistons. If he would experiment with a real fire-piston and with paddy husks as tinder, success would go some way towards conviction, but on the face of it an airless iron cylinder would not serve at all as a 'contrivance for 'keeping fire alight when produced.' The material of the objects also appears unlikely to be a suitable medium for a fire-piston unless cylindrically turned and polished, a finish not indicated by his illustrations. I would suggest that before coming to any final conclusion as to the identification of these objects experiments should be made to test the possibility of using paddy husk as tinder and iron for both piston and plunger. Personally I remain sceptical and still inclined to agree with Mr. Sarkar, and should be interested to see the objects illustrated in section.

J. H. HUTTON.

Confinement at Puberty. (Cf. MAN, 1927, 30.)

217 SIR,—The Fijian custom of confining girls out of the way of the sun was described in the *J.R.A.I.*, XLIX (1919), p. 48. The guess, mere guess, was then hazarded that the original purpose was to prevent impregnation by the sun. Then came Cambodian evidence which seemed to veto this guess (MAN, 1927, 31). It now appears that first thoughts were best. At her first menstruation a Taos Pueblo girl "stays quiet for four days in the *Koye*, or ground room. "A wagon sheet is raised over her lest the sun shine on "her and after marriage she bear twins." (Elsie Clews Parsons, *Taos Pueblo*, General Series in Anthropology, II, 47a, cf. 39b.)

This links up the custom with the problem of twins.

There remains the Cambodian evidence to fit in. At present it will not fit.

A. M. HOCART.

Death and Mourning Ceremonies on Normanby Island. (Cf. MAN, 1937, 172.)

218 SIR,—I am sorry to have caused, through an oversight, the misunderstanding mentioned by Sir Hubert Murray (MAN, 1937, 172). A chapter of a forthcoming book of mine deals with 'Death and Mourning Ceremonies' in general, but the bulk of the material is taken from Normanby Island with an introduction and a postscript. I am afraid I did not make this quite clear in the synopsis. The first ten lines of my abstract (MAN, 1937, 57) do not refer to Normanby Island.

With regard to the second remark of Sir Hubert Murray, on the eating of the belly of the deceased in the *monu* (taro pudding) as part of the *gute* type of ritual, this is taken from the account of old men on what used to take place in old times. This part of the ceremony is omitted to-day, when they perform the *gute* rite.

G. RÖHEIM.

Eastern Himalayan Blood Groups. (Cf. MAN, 1937, 159.)

219 SIR,—I have to draw your attention to a slight inaccuracy in Dr. Macfarlane's article (MAN, 1937, 159, p. 128, col. 2, l. 2). So far as my knowledge goes I am the only person who has 'typed' the Paniyans of Wynaad (MAN, 1936, 255), but in her paper, Dr. Macfarlane gives her name within brackets after 'Paniyans' of Wynaad. (col. 2, l. 2). In her previous paper (in her list of references), she points to her work on 'tribes' (?) of Cochin. Wynaad, however, is not in Cochin. So I am led to infer that her authorship should refer only to the Jews of Cochin, and not to the Paniyans. Government Museum, Madras.

A. AIYAPPAN.

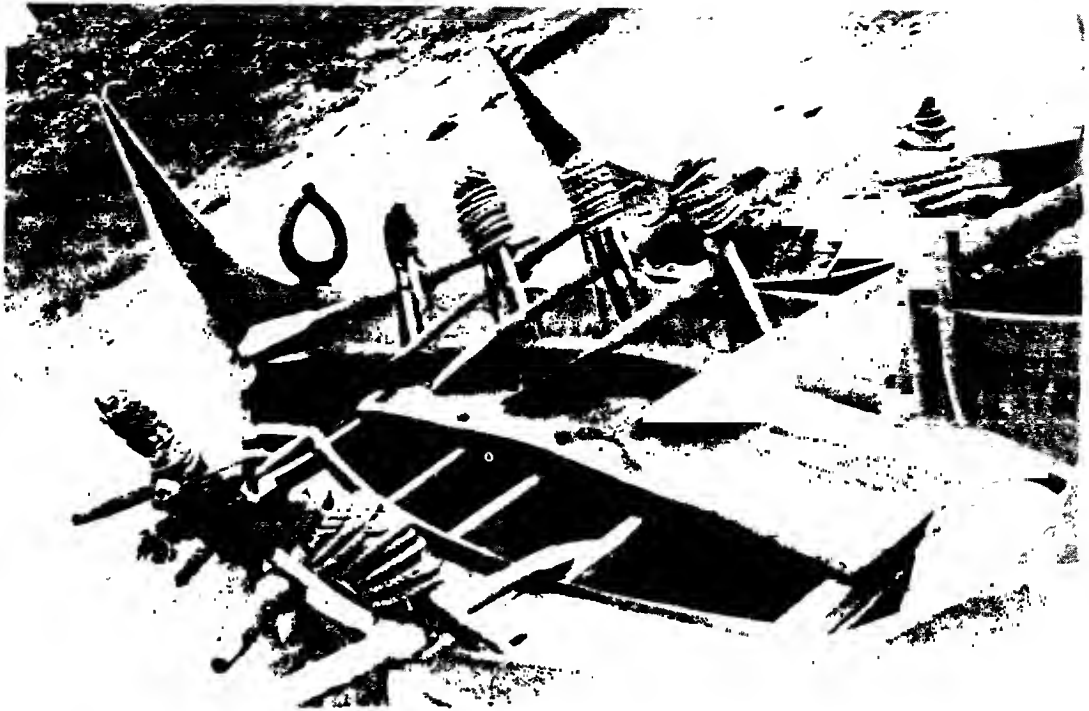


FIG. 1. INTERIOR, SHOWING ARRANGEMENT OF OARS, LATERAL CROSS-MEMBERS, AND RIBS.
The smaller craft on the far side is a 'tutara' as in MAN 1936, Plate L.

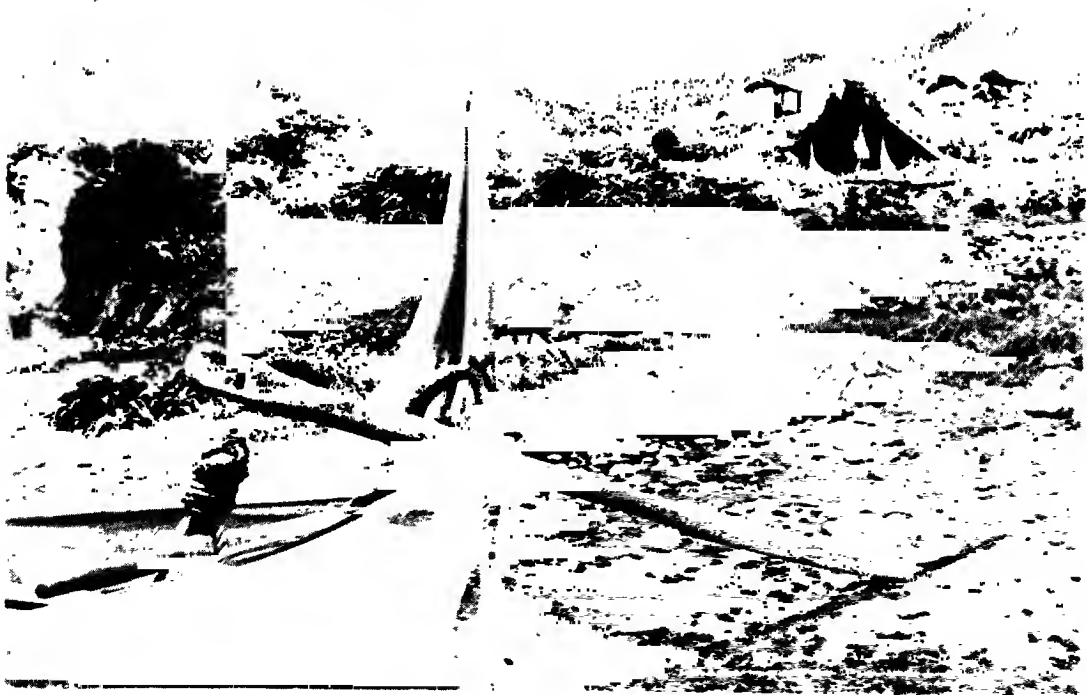


FIG. 2. STERN-SWEEP IN POSITION.

THE 'CHINEDKULAN' CANOE OF BOTEL TOBAGO.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

PUBLISHED UNDER THE DIRECTION OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

XXXVII, 220-237

DECEMBER, 1937

ORIGINAL ARTICLES.

Oceania.

With Plate M.

Leach

BOAT CONSTRUCTION IN BOTEL TOBAGO. *By E. R. Leach.*

220 In MAN, 1936, 200, Mr. James Hornell contributed an interesting article on the subject of the boats of Botel Tobago Island, near Formosa. I recently spent several months on this Island during which I made a careful study of the local boat design and I am therefore in a position to elaborate certain points of detail which are not immediately apparent from the boat specimen in the Hamburg Museum für Völkerkunde, from which Mr. Hornell derived his data.

Botel Tobago boats are actually of two distinct types. The 'tataru,' (the type illustrated by Mr. Hornell in his article) is a small boat with rowing space for either one or two scullers, while the 'chinedkulan,' though similar in general design, is a much larger craft and has accommodation for



FIG. 3. STERN OF THE SAME CRAFT AS FIG. 1, SHOWING UPWARD SWEEP OF THE WASH-STRAKE, AND THE POSITION OF THE STERN-SWEEP ROWLOCK.

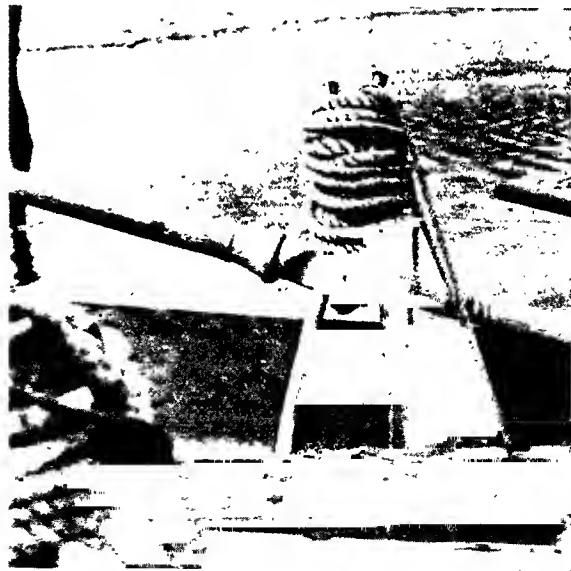


FIG. 4. ROWLOCK FOR AN ORDINARY OAR.

ten rowers (seated), each with one oar, and a helmsman (standing) with a long steering sweep. It is particularly to be noted that both types of craft are always rowed and never paddled.

Details of the stern sweep, stern rowlock, and general seating arrangement of a typical 'chinedkulan' may be seen from the accompanying photographs (Plate M, figs. 1, 2).

The holes in the washstrake ledge which Mr. Hornell assumed to be the attachment for paddling thwarts are actually the fixing holes for the rowlocks (fig. 4). In the 'tataru' the rower sits on the bottom of the boat, in the 'chinedkulan' he is, as it were, a deck higher up (Plate M, fig. 1). The rowers do not actually sit on the bare boards but on a flat circular rowing seat, easily portable, which each man takes home with him.

In the 'chinedkulan' the single centrally placed U-shaped transverse frame of the 'tataru' is replaced by two similar frames placed symmetrically about one-third of the boat's length from each end. When the ribs are arranged in this manner, the method of lashing is as shown in MAN, 1936, Plate L, fig. 4, and not as in fig. 3: that is to say the rattan lashings are threaded through two holes in the rib and are then lashed back onto the comb cleats; there is not a double row of comb cleats on each side of the frame rib as seen in MAN, 1936, Plate L, fig. 3, but only one row on the inside of the rib (*i.e.*, on the side nearest the centre of the boat). The effect of this arrangement is to make the gunwale lines of the 'chinedkulan' assume a rather more cigar-shaped plan-form than is the case with the 'tataru.' In the 'chinedkulan' additional strengthening is supplied by five horizontal cross members, which besides acting as supports for the rowing seats, supply lateral thrust to the sides of the boat (Plate M, fig. 1). The 'chinedkulan' differs further from the 'tataru' in that there are four strakes on either side of the keel instead of three. The top strake is not attached in any way to the U-shaped transverse frames and is held in place only by dowel pins and the comb-cleat ties at each end.

For the purposes of photography I purposely chose an undecorated specimen of 'chinedkulan' so as to demonstrate the details more clearly. The decorative design of the more usual type conforms closely to that of the 'tataru' illustrated by Mr. Hornell. The elaborate circular

discs commented upon by Mr. Hornell are a constant feature of the decoration and are always symmetrically placed at each end of the boat. This decoration is called 'mata nu tataru'—'eyes of the boat.' Mr. Hornell rightly points out that each half end-piece of the top strake (washstrake) is cut from the solid; in addition it is always cut from the base of a tree so that the wood grain may follow the curve of the prow; this detail is clearly seen in Plate M, fig. 2.

The Botel Tobago boat design is not entirely unique even in its own region. Very similar

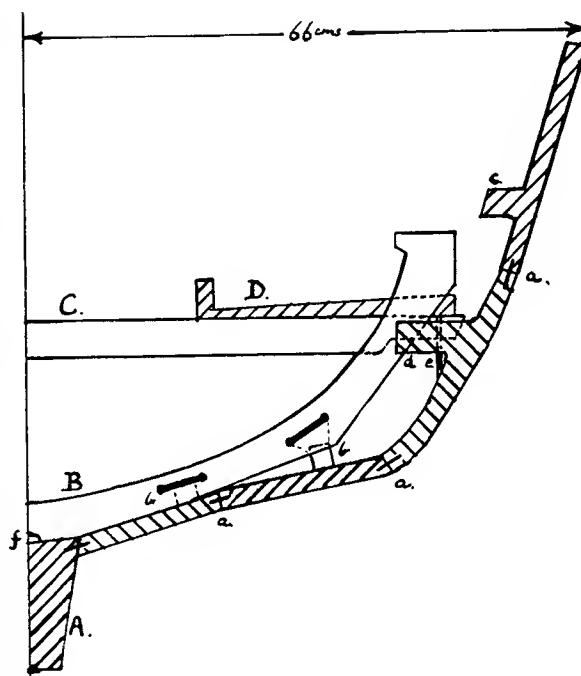


FIG. 5. HALF SECTION (TRANSVERSE) OF THE BOAT FROM BOTEL TOBAGO.

craft are (or were until recently) constructed by the Batans of the Northern Philippines. In Formosa also I have seen a boat of similar type said to have come from the Ami region on the East coast. The outer decoration of this differs slightly from that of the Botel Tobago type and does not include the 'mannikin' design (MAN, 1936, 200, fig. 5) which is particularly typical of the Botel Tobago decoration. I have seen no specimen of the Batan boat.

As regards the possibility of cultural diffusion being responsible for the widespread occurrence of certain of the constructional details of these

boats, I can only report that the 'tatará' is unseaworthy in even a mild swell, and that the craft becomes completely unmanageable in any sort of wind. The 'chinedkulan' is a good deal more stable, and journeys from Botel Tobago to the Batans (about 50 miles) are said to have been of fairly frequent occurrence within comparatively recent times. No such ambitious

journey has ever been attempted within living memory.

The principal dimensions of the 'chinedkulan' illustrated in the accompanying photographs are:—Length 7·50 metres; beam (amidships) 1·35 m.; height (at end) 2·15 m.; (amidships) 0·75 m. I shall be only too glad to supply further details to anyone who is interested.

THE CHRONOLOGICAL PLACE OF THE VAULTED TOMBS AT KNOSSOS, IN RELATION TO THOSE OF RAS SHAMRA. *By Sir Arthur Evans, F.R.S.*

221 In my second Report on the Tombs of Knossos, communicated to *Archæologia*, Vol. LXV, and issued in a separate form in 1914, I had assigned the smaller built tomb at Isopata (No. 1) to the last Palatial Age on account of its Late Minoan II. ceramic contents. The gold signet ring found on the floor of the chamber also agreed in style with this attribution.

The chronological succession of the Minoan engraved gems, that further discoveries have now enabled me to establish (*Palace of Minos*, IV, ii, p. 499 *seqq.*) counteracts this evidence. In the covered part of the Cist itself was found a chalcidony bead-seal (gold-mounted, of the 'flat cylinder' type¹) and this class of engraved gems is itself now shown to be a characteristic product of the Second and Third phase of the Middle Minoan Age², barely surviving into the Late Minoan Ia stage.

So, too, the group of sepulchral relics thrown out at the opening of the dromos of this tomb—which had led to its discovery—including bronze weapons and a typical brown limestone vessel with shell inlay, undoubtedly belonged to the earlier phase of Middle Minoan III. The excavators had indeed expected to find a M.M. III tomb, and it was only the L.M. II pottery and signet ring and analogies drawn from the neighbouring Royal Tomb that led to the abandonment of this view.

The 'Royal Tomb' itself³ supplied a very fine series of Late Palace Vases (L.M. II). Its entrance, moreover, had apparently been finally secured by clay sealings impressed by a lentoid seal of that date.

¹ 'The Tomb of the Double Axes, etc.' (*Archæologia*, LXV), p. 9, Fig. 14.

² The earliest element in the Thisbe series was a group of three gold ring besils of this class, from their style possibly L.M. Ia, but not later.

³ 'Prehistoric Tombs of Knossos,' p. 136 *seqq.* (*Archæologia*, LIX).

But here, too, certain conflicting data were apparent.

Among the stone vases represented, in addition to a group of a typical Eighteenth Dynasty character, were others pointing to intimate Middle Kingdom contact, and others where the tradition of Fourth Dynasty influence was still strong.

So much indeed, was I impressed at the time with the early character of many of these stone vessels, which could hardly be explained sufficiently on a theory of 'heirlooms,' that in summing up my general conclusions regarding the Royal Tomb I did not hesitate to remark that "indications such as the above strongly point to the conclusion that the Isopata Tomb itself goes back to an earlier period than that represented by the vases in the later Palace style."⁴

In further support of this I called special attention to the character of the signs cut on the blocks themselves and noted their correspondence with those 'of the earliest structures of the Later Palace at Knossos.' That judgment can be only confirmed. A very remarkable collocation of these signs indeed was presented by the stone lintel of the blind opening in the West wall of the inner chamber, consisting of the 'branch,' the 'double axe,' the 'trident' and a 'wheel' sign of unusual type. On the ritual character of such blind openings Monsieur Schaeffer's discoveries at Ras Shamra have now thrown welcome light.⁵

The use of similar signs is paralleled, moreover, in the case of the smaller built Tomb (No. 1) at Isopata. In this, at the internal angle between the two sections of the cist, had been set an upright block surmounted by a smaller one, and on this had been cut the 'trident' sign. We now know that in L.M. II. signs were no longer incised on Palace blocks.

⁴ *Prehistoric Tomb of Knossos*, 1906, p. 166.

⁵ See my remarks *Palace of Minos*, IV, ii, p. 771 *seqq.*

In truth the more we know of the superficial and makeshift character of the concluding palatial phase at Knossos, the less does it fit in with the fine architectural construction and massive masonry of the Royal Tomb. Since its discovery the explorations on the east slope of the Palace site have indeed provided a contemporary parallel in the structural remains of the viaduct and of the bridge over the Vlychia brook. In connexion with both these structures were found blocks with one face splayed so as to form part of a horizontal arch, in the same manner as the Isopata vaulting, but of somewhat rougher work. Judging indeed from the character of the signs on some of the blocks belonging to the 'Stepped Portico' which forms the continuation of the same system, these structures belong to a somewhat earlier palatial phase than the Isopata Tombs and centre

rather in M.M. II. The use of the horizontal arch and vault must in fact go back to the earliest Palace Period, or approximately to the twentieth century B.C.

Monsieur Schaeffer has kindly informed me that as a result of the last campaign of the French Mission at Ras Shamra (Ugarit) it may be taken as demonstrated that there was an actual Minoan Colonization there as early as the Second Middle Minoan Period, which was already reacting on the local North Syrian Culture. It will be seen from the evidence supplied from the site of Knossos, as rightly understood, that the parallel between its vaulted tombs and those of Ugarit—the City represented by the remains at Ras Shamra—ought itself to be carried back to that epoch, though I gather from Monsieur Schaeffer that the evidence of this is not at present forthcoming.

RECIPROCAL CLAN RELATIONSHIPS AMONG THE BEMBA OF N.E. RHODESIA. By A. I. Richards.

222 Opposite clans performing reciprocal ritual duties and standing in a joking relationship to each other have been reported among several of the Central Bantu tribes,¹ but the distribution of this type of clan organization in Central and East Africa is as yet unknown, and the whole phenomenon has never been fully described to my knowledge. I am therefore publishing the following notes on the *Banungwe*,² or opposite clans of the Bemba of N.E. Rhodesia in the hope of eliciting further comparative information on the subject.

The Bemba are divided into forty or more exogamous matrilineal clans (*mukoa*) tracing descent through the mother to some original ancestor or ancestress, a more or less legendary figure dating from the time of the first occupation of the present territory of the Bemba two

to three hundred years ago. Membership of a *mukoa* determines a man's legal affiliation, his descent, and his succession to the name and status of dead relatives, or to particular offices, ritual or political. It gives him certain rights to hospitality and support.

The distinguishing mark of clan membership is the use of the *mukoa* name. A man describes himself as a *mwina* (plural *bena*) or a member of such and such a clan (e.g., *mwina nkalamo*, a member of the lion clan).³ Besides its title the clan possesses its own 'praise-names,' to give the English term used for such honorific terms of address as the *Sibongo* of the Southern Bantu. These praise-names are phrases making reference, usually in boastful language, to the names of the first, or most famous ancestors of the clan, or mentioning an incident in its early history, or the attributes considered to belong to its members. Such sentences are used in greetings, in jokes between members of different clans, or in public declamations before a *mukoa* head on some ceremonial occasion, usually at the court of the Paramount chief. The *mukoa*

¹ Cf. *Awalongo* of the Lamba. C. Doke, *The Lambas of N. Rhodesia*, 1931, p. 197, and the *Banungwe* of the Bakaonde. F. H. Melland, *In Witch-bound Africa*, 1923, pp. 251-53.

² E. B. H. Goodall, late Provincial Commissioner of the Ndola area, wrote a short descriptive note on the *Banungwe* in *Some Wemba Words*, 1921, p. 75, and I would like here to pay tribute to the value of the ethnological material contained in this small vocabulary. It must be only a fraction of the author's very wide knowledge of Bemba customs, of which his recent sudden death deprived us. Cf. also my reference to the *Banungwe* in 'Preliminary Notes on the Babemba of N.E. Rhodesia,' *Bantu Studies*, September, 1935.

³ The same word *mwina* is used to describe the subject of a chief, the inhabitant of a district, or the consort of a man or woman. In the western part of the district and in the Katanga area of the Belgian Congo, *Bena* is used to preface tribal names as distinct from clan names, e.g., *Bena Cishinga* in the Bangweulu district, or the *Bena Kalundwe* in the Katanga area, cf. E. Verhulpen, *Baluba et Balubaïses*, 1936.

praise-names are very similar to those shouted in honour of a chief on formal occasions or used as titles of address to him, and these phrases, preserved exactly in traditional form, and often expressed in archaic language, appear to be characteristic of Bantu chieftainship and clan system. Malinowski has shown in a typical Melanesian society how the myths of a clan origin, 'owned' and recounted by its members, form a recognized charter for the exercise of legal privileges such as rights of occupation of land or ritual prerogatives, and it is quite probable that among Bantu, where myths, in the sense of tales of the miraculous doings of clan heroes are rare, yet the recitation of the names of clan or chiefly ancestors, the repetition of stories of their lives, or the shouting of a key sentence or proverb from such tales may fulfil very similar sociological functions.

It is the name of the Bemba *mukoa* and the story of its acquisition by a special lineage group that provides the basis for the pairing of opposite clans, or *banungwe*. The clan names are those of a variety of objects, animal, plants, meteorological phenomena such as rain, parts of the human body, and even cultural activities such as funeral lamentations. The most common are the following:—crocodile (*ngandu** or *ngwena*—the royal clan), fish (*sabi*, or in the Bisa country *tembo*), lion (*nkalamo*), leopard (*ngo**), otter (*mbao*), rat (*mpuku*), frog (*luo*), bees (*kashimu*), elephant (*nsofu*), wild pig (*ngulube* or *Cabala** or *nama*), tortoise (*Nkumba*), goat (*mbushi*), dog (*mbwa*), honey-bird (*nguni*): millet (*bisa**), porridge (*bwali*), mushroom (3 clans—*boa*, the ordinary word for mushroom, *mwansa*, a special type of mushroom, and *ngona*, the Bisa mushroom clan), grass (*kani*, diminutive of *cani*), gourd (*lunda*), castor-oil seed (*mono*), wild loquat (*mumba** or *Cilufya*), tree or drum clan (*ngoma* or *muti* in Bisa country), beans (*nkanda**): iron (*mbulo*), rain (*mfula*), anthill (*culu*), male genitals (*membe*), female genitals (*nkashi*), lamentations (*nkonde** or *misoa*), pot (*inongo*). It is interesting to note that some of the names are words no longer in common use, *i.e.*, those marked with an asterisk, and that the majority of these titles are found widely spread among those Rhodesian tribes which claim an origin from the Luba-speaking peoples in the Congo, such as the Kaonde, Bisa, Ushi, Unga, etc. This is especially true of the

oldest clan names (*bwali*, *ngandu*, *sabi*, *ngulube*, *boa*, *ngoma*, *mumba*, etc.)⁵

Some of these *mukoa* names are accounted for by a story describing the original splitting off of a lineage group to form a new clan. For instance, natives say that the ancestors of the lamentations clan (*nkonde*) were once members of the wild loquat clan (*mumba*) who had settled far away from the parent village. One of their members died but the rest of the *Bena mumba* refused to come and wail at the funeral. Hence a split took place between the two groups, and the younger branch declared, 'We must wail for ourselves now. Truly we are a clan of mourners.' Other stories are so uncomplimentary that they are narrated only by members of other clans, *e.g.*, that of the mushroom clan (*Ngona*), the royal clan of the Bisa, said by some to describe the splitting off of the Bemba proper from the Bisa during the original migration into the country. In this instance the ancestress of the present mushroom clan refused food to a hungry child of the royal or crocodile clan of the Bemba, declaring the pot she carried on her head was empty. But she stumbled and fell and the pot rolled off her head and was shown to be full of mushrooms. Hence, so the Bemba Paramount chief declares, 'We said: You clear off now and leave us alone. You have refused our child food. We call you the mushroom people now.'

Other *mukoa* names are actually those of the original ancestor of the clan itself, usually used as an alternative title, *e.g.*, *Cilufya*, an ancestor of the wild loquat clan, and a name less commonly used for it. In some cases I could get no story of the origin of the clan names.

The *banungwe* of each clan are those whose object 'by its nature is hostile to or dependent 'on or complementary to one's own.'⁶ For instance, the crocodile and fish clans are *banungwe* to each other since crocodiles live on fish: the

⁵ The *Mukoka* or matrilineal clans of the Lamba include 15 of the same clan names. Cf. *vide* Doke, *op. cit.*, p. 196.

I have not used the word 'totem' for these clan-name objects since the use of the *mukoa* name is not associated with any special cult of the animal or plant, with a taboo on its use, legends of descent from the object, or identification of the clan members with the species of animal or plant, or indeed any of the features considered characteristic of totemism as described in such classical areas as Australia, or N. America.

⁶ E. B. H. Goodall, *loc. cit.* Some identical pairs are recorded by Doke among the Lamba, *op. cit.* p. 197

mushroom and rain clans are similarly paired since mushrooms cannot grow without rain; the porridge and the pot are equally essential to each other.

It will be seen that as it exists at the present day, this system of opposite or complementary clans can hardly be described as a form of dual organization, since each *mukoa* is not systematically paired, but has often a number of different partners linked by the apparently arbitrary factor of the clan name. The man's and the woman's clans are separately paired, it is true, and each has no other *banungwe*, but the rain clan (*mfula*) counts as its opposite numbers all the clans with plant names (the millet clans, the gourd, the mushroom clans, the grass, the tree, etc.) since plants cannot grow without rain. The fish clan members are also *banungwe* to the rain people, since fish only spawn when the rain has begun to fall. The iron people reckon themselves *banungwe* to members of all clans with the names of animals hunted or killed with iron spears or arrows, i.e., the elephant, lion, leopard, etc. The animal clans also have reciprocal relations not only with the iron people, but with any *mukoa* named after an animal smaller than itself which forms its prey (e.g., the lion and goat) or with the vegetable names in the case of a herbivorous species (e.g., elephant and grass, etc.). The members of the mourning clan laughingly assert they are *banungwe* of all the clans since they are experts in mortuary ritual!—one of the reciprocal functions performed by *banungwe*.

What are the reciprocal functions the *banungwe* perform for each other? Their ceremonial duties are chiefly confined to funeral rites.⁷ The *banungwe* of a dead man's family both help and harass him at the burial ceremony. When the mourner's party has set off with the corpse to the grave-yard a man and a woman of any of the opposite clans remain behind to whitewash the hut contaminated by the touch of death, and to open the door for the wailers as they return. This is an unpleasant duty since contact with death necessitates subsequent purification. It is, moreover, a task which cannot be performed by members of the dead man's own clan. When the burial is over and the question of inheritance

has finally been settled the *banungwe* are again essential. They have also to brew the beer for the feast held for the kinsmen on such occasions. Besides these necessary ritual functions which people perform for their *banungwe*, they also taunt them at the funeral, irritate them and make jokes. Some of the opposite clan members must follow the burial party to the grave. The moment the body has been buried and earth piled over it in a mound, one of the *banungwe* breaks the silence with a sudden shout. He rails at the mourning family, mocks at them, and accuses them of having buried a live man. He calls out, 'You, there! Why do you bury a man who is alive? Listen to him knocking down there! Can't you hear him? He is asking for some snuff. You enemies, you! (the usual term applied by *banungwe* to each other). See what things you do! You go and bury live men!' The taunts are, of course, expected, but were received, at each funeral I attended, with a kind of horrified silence, till suddenly the tension broke, and the mourners who had been wailing for some six hours without break, began sheepishly to laugh, and broke into an unceremonious run back to the village, still pursued by shouts from the irrepressible *banungwe*, 'Look out you now! He has risen (*Kubuka*) from the grave, that man you buried. He is coming after you asking for porridge.'⁸ Older natives say that the mourners were beaten by their *banungwe* in the old days and add that the latter were also responsible for handing over to the heirs the insignia of inheritance—the bow of the dead man, or the belt of the woman—but I never saw either of these customs practised myself.

As ritually expressed the traditional attitude between *banungwe* is therefore one of hostility, and yet, as the complementary nature of the clan names imply, one of reciprocal service. *Banungwe* regularly address each other as 'You, my enemy!' (*Mwe mulwani mwe!*) and delight in laughter at the habits of the objects, whether animal or plant, of the opposite clan. A member of the crocodile clan will scoff at one of the fish people and deride him as, 'You! You are just my food ration!' (*poso*, the word used for a government ration given to employees). 'Come over here! I want to give you to my wife to cook.' The *munungwe* of the fish clan retaliates

⁷ It is interesting to note that the legends of origin of the Lamba *mukoa* usually refer to the behaviour of the clan ancestors on their return from a funeral. C. Doke, *op. cit.*, p. 193.

⁸ The word *kubuka* is that used for a dead man's spirit which returns to haunt the living (a *ciwa*).

with a derisive imitation of the slow ungainly walk of the crocodile and compares its gait with the speed of the fish. At the court of the Paramount Chief this type of joking relationship has been formalized, and the head of the fish clan, a *mukabilo*, or hereditary priest of the tribal ancestral spirits, must dramatize the joking antagonism between the two clans by appearing in special regalia each time he visits the chief, and threatening him with a broad-bladed fishing spear. On such occasions the Paramount is protected by the head of the dog clan, who has to dance in front of him, pretending to bark in defence of his master. The surrounding courtiers shout the praise names of the fish clan, and encourage the actors. Such a ceremony may be enacted some four or five times during one week during a session of the tribal council. It is never omitted, although performed with diminishing gusto as the week proceeds, and sometimes under modern conditions as a preface to some matter-of-fact discussion of tribal business under the Native Courts Ordinance.



FIG. 1. THE FISH CLAN MEMBER IN REGALIA THREATENING TO SPEAR THE CHIEF, WHO IS SEATED AT THE TOP OF THE MOUND PROTECTED BY THE DOG CLAN MEMBER (STANDING).

In spite of the joking hostility, *banungwe* behave to each other with special ease and freedom.⁹ They can demand privileges of each other and take each other's possessions. They can swear at each other obscenely (*kutuka nseli*), a form of injury for which the sufferer can claim legal redress as an ordinary rule. It is said that even a commoner may swear at his chief in this

⁹ My native clerk, asked to type out some notes on *banungwe*, translated the term as 'totem friends.'

fashion, if the two are *banungwe*, but I never heard this done. A man can also tease his *munungwe's* wife and pretend to make indecent proposals to her. Lastly, *banungwe* may call down curses on each other with impunity (*kulapishya*, a very serious curse believed to be fatal as among ordinary people). This is done nowadays jokingly at the time of the new moon. Time after time I have heard the crescent moon greeted by shouting children tearing round the village calling the names of their *banungwe*, saying, 'Moon! Come and eat the people of such and such a clan!'¹⁰ *Banungwe* are said to be able to take each other's possessions without let or hindrance in joke at the time of the new moon. If a man seizes an axe from the hut of a member of an opposite clan, the owner has to redeem it with 1s. or some small coin. Men pretend to raid the huts of their female *banungwe*, and particularly to snatch any objects, clothes, or cooking pots, that may be set to dry on the roofs.¹¹

There seems also to be evidence that the *banungwe* relationship was originally associated with reciprocal marriage rights. An intelligent old chief told me, 'Banungwe used to marry each other in the old days. It was specially good to do so. It was like the marriage of cross-cousins.' Another elderly informant explained, 'The *Banungwe* are our wives because we knew each other a long while ago and because there is no in-law avoidance (*mako*) between us. We used to exchange each other in the old days.¹² That is why there is no *mako*. All those women (i.e., the *banungwe*) are our wives.' The younger native does not give a retrospective explanation of this sort but merely laughs and says he can shout at his mother-in-law if he has married a *munungwe*. It does not matter what

¹⁰ The Bemba usually curse by *Lesa*, the High God, or by the ancestral spirits of dead chiefs. I only heard cursing by the moon on such occasions.

¹¹ The available data shows us that the Bakaomle also tease members of their opposite clan (e.g., birds and kaffir corn clans, etc.) whom they call *Banungwe*, which Melland translates as 'tease or victim.' He mentions small gifts such as beads, honey, or beer given by the chaffed man to the joker. Melland, *op. cit.*, p. 252. The Lamba clans are paired in opposites known as *awalongo*, some pairs resembling the complementary clans of the Bemba, and Doke states that the opposition between two clans is to-day confined to jesting, *op. cit.*, p. 197.

¹² For exchange he used the reciprocal form of *Kusalushya*—to exchange, i.e., *Kusalushyana*—this word being used for marketing or bartering goods.

he says to her. There is no *mako*. It is common, too, to hear jokes between men and women in the *munungwe* relationship. To call to a girl of an opposite clan, 'Come here! You, my enemy! You, my wife! Come into my hut!' is a favourite form of flirtation.

To summarize, the *banungwe* relationship among the Bemba implies ritual interdependence, a partnership of enemies, expressed in ritual, traditional jokes and freedom in daily intercourse, and preferential marriage claims, no longer exacted, but still reflected in flirtatious behaviour between the two sexes of opposite clans. What seemed to me incomprehensible at first was that a reciprocal clan relationship which prescribed so many types of human behaviour should be based on the apparently arbitrary factor of a clan name and the qualities of the clan object, e.g., the power of the rain to make the mushrooms grow, or the fish spawn. How could the reciprocal responsibility for mortuary ritual and preferential marriage rights between members of opposite clans depend on a system of grouping in which each *mukoa* had a number of possible *banungwe*, and, as afterwards transpired, its members were often doubtful as to exactly who these were?

Further comparative material will probably throw light on this problem. My own tentative explanation is that the pairing of the clans on the basis of the complementary or hostile nature of the animals or plants they are named after, has been extended far beyond its original use by a process of analogy, and that the introduction of reading and writing has accelerated this extension in an interesting way. I think there is evidence that the *banungwe* were originally pairs of matrilineal clans established in one locality, and that their relationship can only be explained by a knowledge of the Bemba method of conquest of their present territory, and their religious concepts as to the tutelary deities attached to different localities. Tradition describes the first immigration of this tribe from the Congo into their present territory in small lineage groups which settled, grew in numbers, split and then moved on. Sometimes a group found the land empty and sometimes another small band of kinsmen the '*Bena* so and so' were discovered in occupation. In the latter case the new immigrants were dependent, according to Bemba belief, on the first settlers to carry out the rites of propitiation to the ancestral spirits attached to that tract of land. With these prayers for general blessings were often

associated the duty of burying the chief of the new arrivals, usually the conquering group. This fact is mentioned in a number of legends of the immigration of the Bemba and kindred tribes. The first Citimnkulu, or Paramount Chief, is said to have died on the march and was buried by an old man, a member of the millet clan, whom he found in possession of a grove of trees there. A member of the millet clan is still appointed as the *Shimualule*, or hereditary burier, of the principal chiefs of the Bemba to-day, and he is still responsible for the final and most powerful rain ceremony, when the prayers of the Paramount himself have failed. The mortuary ritual of the Bemba chiefs is so complex, and there are so many hereditary officials responsible for it, that the millet clan are never described simply as the *banungwe* of the royal crocodile clan, but among the kindred Bisa tribes living in smaller groups near L. Bangweolu, we find to-day the hereditary burier of the chief always drawn from one clan and always responsible for the annual prayers for the fertility of the land, his clan definitely described as the first occupiers of the territory, and moreover as the *banungwe* of the royal clan. Thus Chief Matipa on Cihubi Island is buried by the head of the Wild Pig clan (*ngulube*) who are *banungwe* of the royal clan of that island, which is the tree clan (*ngoma*), the descendants of conquering immigrants who arrived about a century ago. This hereditary burier is in charge of the sowing and first-fruit ceremonies in this island and not the chief.

This seems to me to throw light on the original pairing of opposite clans. From the same area comes a legend of the successive settlement of two groups which suggest a possible reason why preferential marriage rights should be associated with reciprocal burial duties, or at any rate embodies the traditional native explanation of the custom. The Bisa, living under Chief Nsamba in the L. Bangweolu district say the *Bena Nkashi* (woman's clan), came up the river first to their island. Then the *Bena Mfula* (rain clan) came in canoes. They ate with the *Bena Nkashi* and started to move off. But the head of the local group said, 'Stay here. We are alone here. We have no women here. Let us live together.' And the newcomers agreed. So the rain clan gave the sister of their chief in marriage to the head of the woman's clan. When the latter died he had no heirs of his own to bury him, so members of the rain clan buried him. Later another

group of immigrants arrived, the *Bena Ngoma* (tree clan, that of the present Bisa chiefs of the district). They found the rain clan in possession, and begged them to pray to the spirits of the land 'since they were the owners of the land' and to bury their chiefs. The story ends, 'So the rain clan are the priests (*shiniapapo*) here to-day. They are the *Banungwe* of the woman clan. They took their wives from them. They are also the *banungwe* of the tree clan.'

It is impossible to speak with certainty as to the origin of the *Banungwe* relationship, but these living traditions as to the ritual interdependence and marriage exchanges of pairs of matrilineal lineage groups settled in one locality in the early days of the occupation of the country seem to throw out clues. Once the clan names, usually bestowed as we have seen, from some legend as to the split or amalgamation of two local groups, became linked in traditional linguistic forms (praise-names, ceremonial utterances, formalized jokes, etc.), as complementary or hostile, the extension of the *banungwe* concept to the classification of other clan objects would follow readily. I have no evidence that this process took place in the past, but I have seen it occurring to-day. A native, asked the *banungwe* of such and such a clan, gives one or two pairs automatically, and these are invariably among the oldest clans, with well-known legends of origin and local centres. Then he stops to think and adds more names, and then proceeds to argue with himself, for instance, that if iron is

hostile to the elephant, it must be the enemy of the leopard, the wild pig or the lion too. This process of extension of the term *banungwe* to all clans named after objects considered complementary or hostile in their nature is seen most strikingly in the case of educated Bemba, who like to make careful lists of all the possible pairs of clans and reach a far greater number than those supplied by an illiterate old native. The fact that the grouping of opposite clans no longer regulates marriage or is based on local residence, but is limited to ceremonial functions and a pleasant teasing form of intercourse, makes this apparently arbitrary classification easier. The fact that it is in the name of the *mukoa* object, together with the traditional fiction of descent in legal affiliation which forms the distinguishing mark of Bemba clan membership rather than local association and ownership of land or property, material or immaterial, also makes it comprehensible that the *banungwe* concept should be readily extended to other clans beyond those first historically paired. Whether a similar process of extension of the paired clan idea took place in the past as each new lineage group grew and became differentiated, it is impossible to know, but it is worth inquiring whether, in contiguous areas where reciprocal clan relationships are found, there are also legends of origin of paired lineage groups, locally associated, with the one dependent on the other to secure the blessings of the Tutelary deities attached to the land.

ROYAL ANTHROPOLOGICAL INSTITUTE : PROCEEDINGS.

Recent Archaeological Developments in South Africa.

223 *Summary of a communication presented by A. J. H. Goodwin, 2 November, 1937.*

A brief account of three major archaeological investigations was given.

At Mapungubwe, a group of fortified sites in the Northern Transvaal, a number of skeletons, quantities of pottery, some beads, gold plating, tacks and ornaments have been found. The evidence of the material objects shows the site as being of the second Zimbabwe period and later. In contrast the physical remains have been diagnosed as Bush-Boskop, with few Negro features. The racial group is homogeneous, and sufficient material appears to have been studied to make the diagnosis conclusive. The Mapungubwe material should throw considerable light on the Zimbabwe culture.

On the Vaal River a survey undertaken by the Geological Survey and the Bureau of Archaeology has yielded important climatic results.

Briefly, the river terraces have been related with

major climatic changes, and with implement types covering the Stellenbosch, Fauresmith and Middle Stone Age periods of this region. The report is in process of publication.

At Oakhurst, in the George district, excavation has been continued for some years. The final report is at present being published.

The cave shows an early layer of Smithfield B types, followed by Smithfield C, Normal Wilton and Developed Wilton. Finally, there is a short phase including pottery. A number of skeletons were recovered, ranging from birth to old age. These are being described by Dr. M. R. Drennan.

The sequence covers much of the Later Stone Age of this region, and for the first time the Developed Wilton has been recognized. This is typified by large numbers of crescents, made of *Mytilus* shell instead of the usual stone. During the period in which the cave was inhabited the dwellers developed some simple method of catching fish.

PROCEEDINGS OF SOCIETIES.

224 **International Congress of Anthropological and Ethnological Sciences.** *Second Session, Copenhagen, 1-6 August, 1938.*

The preliminary programme issued by the organizing Committee gives promise of a most attractive and important meeting. The Copenhagen Congress will be under the royal patronage of His Majesty the King of Denmark and Iceland, and will be held in the National Museum—the oldest of its kind in the world—which will be re-opened in its new building for this occasion.

The Sections have been organized with subjects on which discussion is invited as follows:

- A. *Physical Anthropology*: (a) anatomy and biotypology: relationships between types of fossil man: methodology: the conception of 'race' in anthropology.
- (b) physiology and heredity: geographical propagation of blood-groups in man and their occurrence in other animals.
- B. *Psychology*: influence of cultural factors on character; joint discussion with section F' on cultural changes.
- C. *Demography*: movements of population with reference to birth-rate and death-rate.
- D. *Ethnology*: origin and development of agriculture and cattle-keeping: origin of cultivated plants and domestic animals.
- E. *Ethnography*: (a) Asiatic: the nomad pastoral peoples of Asia and Africa.
- (b) African: see (a).
- (c) American: reciprocal influence of the civilizations of Central America and of North and South America.
- (d) Oceanian: cultural relations of Oceania and South-east Asia.
- (e) Arctic: prehistoric and historic currents of civilization in the circumpolar region.
- (f) European ethnography and folklore: beliefs and customs concerning the agricultural year.
- F. *Sociology and Religion*: the contribution of archaeology and prehistory to the study of intellectual culture.
- G. *Language and Writing*: standardization of native languages: formation of common (creole) languages and civilized languages spoken by native peoples.

It is understood that these subjects are suggestions only, and that communications on other subjects will be welcome, especially if they are such as to invite discussion.

The morning sessions will be devoted to the more detailed papers; the afternoons to lectures and general discussions. At 5.0 p.m. there will be joint sessions and public lectures, and demonstrations. Within each section, papers will be taken in geographical order. Papers already published will only be accepted for exceptional reasons.

There will be exhibitions and demonstrations, in the National Museum, of the Esquimaun and Greenland Scandinavian collections, the prehistoric tools of Denmark, and the Lagoa Santa skulls; in

the Rural Museum of Lyngby, of prehistoric and old Danish building-construction, and of Danish national dances; and of rare books and manuscripts.

After the Congress there will be an extensive excursion to prehistoric sites, and the museums of Ladby and Aarhus.

The subscription to the Congress is 30 Danish crowns. Special terms are offered to relatives accompanying members. The office of the Congress is in the National Museum, 10 Ny Vestergade, Copenhagen k. JOHN L. MYRES.

Second Congress of the Turkish Historical Society.

Istanbul, 20-26 September, 1937.

225 By invitation of the Turkish Historical Society, and under the personal patronage of the President of the Turkish Republic, about fifty historians and archaeologists, from nearly every European country, assembled with many Turkish colleagues in the Dolmabahçe Palace on the shores of the Bosphorus, to receive communications on many topics of the history and prehistory of Anatolia and other regions of the Nearer East. Abstracts of all these were circulated in Turkish, as well as in the language of the speaker, and will be published in due course. The President of the Turkish Republic honoured the Congress by attending many of the sessions, and showed the keenest personal interest in the proceedings, placing also his yacht at the disposal of the Congress for a cruise in the Bosphorus and Marmara, and the Summer Palace for an open-air dinner and display of Turkish music and folk-dances.

A temporary Exhibition, arranged in the Dolmabahçe Palace, gave a remarkable perspective of every period of history and material culture in Anatolia, from the Upper Palæolithic implements recently found in river gravels near Ankara, to printed books and modern works of art and craftsmanship. Separate sections illustrated more particularly the recent excavations of prehistoric sites, and the modern economic social and intellectual advancement of Turkey.

Expeditions were afterwards conducted to Hissarlık, for the excavations on the site of Homeric Troy; to Brusa, for the medieval antiquities; and to Ankara, for Boghazkioi, Aliçar, Alaca Höyük, Yuzgat, and other prehistoric and Hittite sites of Central Anatolia. At Ankara itself the visitors were entertained by the Minister for Foreign Affairs, and by the Governor of the Province, and visited the Museum and other antiquities in the city, and also the recently completed reservoir and the model farm created by the President of the Turkish Republic and presented by him to the Nation. These examples of scientific restoration of the natural resources of an ancient country supplied needful commentary on the results of the excavations now in active progress on early sites of all periods of its long history.

Throughout the Congress, nothing could have exceeded the generous hospitality and efficient

organization of the members of the Turkish Historical Society, whose President, Mr. Hasan Cemil Çambil, Vice-President Bayan Âfet, a lady who holds also a chair in the University of Istanbul, and General Secretary Mr. Muzaffer Göker were supported by Dr. Hâmit Zübeyr Koşay and Mr. Remzi Oguz Arik, of the Department of Antiquities, Dr. Şevket Aziz Kansu, Director of the Anthropological Institute, and many others, whose contribu-

tions to the programme illustrated the width and value of the current Turkish contributions to the subjects with which the Congress had to deal. To them all, their British guests must record their grateful appreciation of such an occasion for renewing old friendships and forming new ones, and for studying fresh aspects of the history and antiquities of Anatolia.

JOHN L. MYRES.

REVIEWS.

AFRICA.

226 *Law and Authority in a Nigerian Tribe, a Study in Indirect Rule.* By C. K. Meek, M.A., D.Sc., with a Foreword by the Rt. Hon. Lord Lugard, K.C.M.G. London: Oxford University Press 1937. Pp. xvi + 372, 2 maps. Price 17s. 6d.

When the Government of Nigeria introduced into the South Eastern Provinces of that territory the system of 'Indirect Rule,' or the delegation to indigenous political authorities of functions of local government, it was confronted by a peculiarly difficult problem. Whereas in the rest of Nigeria it had found large units of population with a high degree of political centralization, in these Provinces there appeared at first sight to be no native political authority at all; indeed, for some fifteen years after 'Indirect Rule' had been fully established in every other part of the Protectorate, it was held to be impracticable here. The policy followed was to constitute native tribunals having jurisdiction over an area wide enough to form a convenient unit for administrative purposes, a representative of each village in the area being appointed to membership. These 'Warrant Chiefs' were also made responsible for enforcing Government orders in the villages. As agents of law their effectiveness was vitiated by the fact that they represented communities which had no common custom, and that it was quite possible, owing to the system of rotation, for a case to be tried by a bench no member of which was familiar with the local circumstances or local usages involved. As agents of executive authority they had in native eyes no right to command other than that which the British Government had endowed them. The riots which broke out in 1927 and 1929, in connexion with the introduction of direct taxation, gave unmistakable proof of their unpopularity. The Government then ordered a reorganization of the whole system, to be based on the recognition of such native authorities as investigation should reveal, the unit of native administration to be no larger than that which by its own customs recognized a common leadership. Dr. Meek was entrusted with the study of the Ibo, a population of four millions who are regarded as a single tribe in virtue of their territorial contiguity and the general similarity of language and culture which characterizes them. So defined, they are probably the largest tribe in Africa; yet for political purposes no group larger than a few villages can be found which recognizes common authorities and a common body of identical custom. In Dr. Meek's view there must be some 2,000 of such small units.

Within each unit, however, he describes an extremely complex set of authorities, kinship heads, secret societies, titled societies, in some cases including societies of women, age-grades, and the priests of Ala, the earth-goddess, whose cult is one of the common characteristics of the whole tribe; each have their recognized place in

the maintenance of respect for law. An intensive study of a single such unit, tracing the interaction of these different organizations, would be of extreme interest.

Dr. Meek draws attention to the fact that there are a number of ways of attaining to a position of authority. Seniority in the kinship group is only one of these ways, and an elder who is incompetent can be deprived of all but his religious functions, or a young man may be appointed to act as his proxy. Wealth, too, gives prestige, and when combined with wisdom and liberality can earn a position 'almost of chieftainship.' Titles are obtained by the giving of feasts and the payment of dues to the titled societies, but a young man is not allowed to embark on the expenditure involved in taking a title, unless his relatives consider him to be of suitable character. The diffusion among these different bodies of responsibility for the repression of crime and the exercise of judicial functions had the effect in the old days that 'law was an affair of the whole community.'

Such a system, as Dr. Meek points out, has considerable merits from the point of view of modern administration. Since it does not attach excessive importance to heredity or seniority, it does not lead to that concentration of authority in the hands of the most conservative members of the community which is often regarded as one of the dangers of 'Indirect Rule.' Native custom itself gives just those openings for the progressive young man, the lack of which in some areas is deplored. Dr. Meek urges the restoration of authority to "those classes of persons who were accustomed and 'best able to exercise it.'" He is not, however, the blind believer in the return to the past, whom critics of the anthropological approach to administration delight to ridicule. Among the most interesting sections of his book are those which deal with the changes in native institutions that modern conditions are producing. Among some groups the titled societies are losing their prestige through the disregard of the privileges of their members shown by the British Administration, the refusal of missions to allow their converts to become members, and the alternative methods of investing wealth that now exist. A European-style house is now a better investment, and confers as much prestige, and as the younger generation comes to regard membership as a waste of money, the chances of recouping the outlay involved on entrance from the entrance dues of later members becomes less and less. A reversal of policy either by the Government or missions could not check this trend where it has set in. Again, Dr. Meek foresees a weakening of that belief in magic which has formed an effective sanction in many spheres of conduct. His opinion is that adjustment to this situation will not be impossible "so long as the Native Courts are allowed to function as genuine native institutions and are not

"forced to conform to standards of English law." If this unforced adjustment is actually allowed, the process will be one of remarkable interest from the sociological point of view.

In the meantime, however, Dr. Meek would favour the introduction into the recognized native courts of the opening prayer to Ala and the ancestors to punish any judge whose decision was influenced by a bribe. The spontaneous appearance of an attitude of disapproval towards individual retaliation is an interesting development of modern times which he reports.

The conclusion, in which Dr. Meek summarizes these tendencies, indicates the potentialities of these native institutions which could be further developed and draws some significant comparisons between Ibo and British conceptions of law, is not the least valuable part of a valuable book.

L. P. MAIR.

Native Administration in Nigeria. By Margery Perham. Oxford Univ. Press, 1937. xii + 404 pp., 6 maps. Price 17s. 6d.

The African system of native administration known as Indirect Rule is of particular interest to anthropologists in that its avowed aim is to secure an evolutionary adjustment of native societies to modern conditions by entrusting governmental functions to traditional authorities. Equally it is an object of suspicion to those who hold that modern developments in Africa have already produced a situation in which the indigenous political institutions are obsolete. The answer made on behalf of Indirect Rule is that it aims expressly, not at the preservation of these institutions in their traditional form, but at their adaptation to modern conditions.

The anthropologist is concerned to ask, here as in connexion with all other aspects of native policy, what is the exact nature of the cultural adjustments that are taking place? How far are the values, implicit in these policies, in consonance with those of the native societies to which they are applied? To what extent have new circumstances and new influences modified traditional standards and affected the institutions in which these are embodied? What, again, is the effect upon them of a political security and a system of production each of which in its own way tends to reduce the dependence of the native unit on its leader which is the strength of chieftainship?

In pursuing these inquiries, the anthropologist is apt to take for granted the non-native side of the question: as matter of technique, it is difficult to combine the detailed observation of a single native unit with the full study of an administrative system whose area of operation may include hundreds of such units. A study such as that which Miss Perham has made of Nigerian administration represents therefore an invaluable contribution to the analysis of the complex problems of culture contact.

Miss Perham deals first with the history of the territory, showing how the system of administration through native authorities was at first held to be appropriate only to the Moslem Emirates with their highly developed political organization, and was later accepted as embodying a principle of general application. The bulk of her book is taken up with description of the very widely different types of native polity to which the system has now been extended. Kano Emirate is taken as typical of the Northern Provinces, the Yoruba chieftainships of the Southern, while two chapters are given to the pagan populations of the north, and four to the events leading up to the Aba riots and the subsequent reorganization of the south-east. The Colony and Lagos, with their highly educated

native population, are dealt with separately, and the possibility of overcoming existing administrative difficulties by the recognition of a native authority discussed. Under the influence of Miss Perham's gifts of observation and narrative, the living reality that it is beyond the imagination of most of us to conjure from official documents appears in a series of vivid pictures, and one's impulse is to ask for a whole library of further volumes, one for each territory.

From the theoretical point of view the most important section of the book is its final chapters, which deal with the work of the technical departments and problems of land tenure in relation to native administration, with the modifications introduced into the system by Sir Donald Cameron, and with its probable future tendencies. In this last section there is a passage which all anthropologists will read with agreement: "So long as the obvious results of mishandling the human factor are not immediately apparent, it is to be feared that sociological investigation will remain the last of the many inquiries which African Governments finance. . . The Nigerian Government has, perhaps, gone further than most in its employment of anthropology. . . Yet Nigeria's achievement is still small beside the great need for knowledge."

L. P. MAIR.

The Anglo-Egyptian Sudan from within. Edited by J. H. de C. Hamilton. London: Faber & Faber, Ltd., 1936. Price 10s. 6d.

This book consists of a collection of articles upon various aspects of the Anglo-Egyptian Sudan. It was originally designed to provide newly joined officials with 'a background of general knowledge' about the country they would have to administer. It sets out therefore to sketch the historical, ethnographical, religious and physical setting to the problems which confront officials in the course of their duties.

The articles, since they are written by men who know their subject intimately, are well-informed; all of them show a sympathetic spirit in their approach to native problems; some of them are masterly, if concise. But on the whole the book presents a slight and selective treatment of its subject, rather than a thorough survey, and there is still room for a comprehensive work of the type of Thomas and Scott's *Uganda*.

Apart from criticism of particular papers, some general reflections force themselves on the mind of the reader. In the first place it is natural for the Sudan official to measure native society by Arab and Islamic standards. He can hardly escape this: by geographical and historical accident the British occupation has come from the north in succession to Arabic and Egyptian conquest. Half the country, and that the more important half, has been profoundly Arabicized. The book tends to reflect this dominant fact. Yet there are two Sudans, as the two first articles of Part II by Professor Evans-Pritchard and Mr. L. F. Nalder respectively remind the reader, and by so doing redress the balance of the book. If history had run a different course the southern half of the Sudan might loom larger than it does, or at any rate might now be seen in rather different colours. If Emm Pasha had, with the help of Sir William McKinnon, succeeded in 'Sarawaking' Equatoria, as for a brief moment he hoped to do; if the Mahdi's power had been rolled up from the south by forces from Uganda; if the French had made good their advance from the west, or the Belgians had not surrendered the Lado Enclave, European officials to-day would be regarding Nilotic peoples and customs from a Bantu or a Sudanic point of view, and not from an Arabic one, and they would have a different and perhaps more accurate appreciation of the negro population of the Sudan.

Another reflection induced by the book is that the Sudan official is by taste and education a humanist, and only incidentally a scientist. At least the scientific outlook does not receive its full chance in this book. Nothing could be better than some of the historical chapters—Sir Harold MacMichael's on "The Coming of the Arabs to the Sudan," or Mr. Newbold's on the "Beja Tribes of the Red Sea Hinterland," in which he plays the fitful light of ancient history on the obscure past of the Fuzzy-Wuzzies and their cousins with illuminating results. But the whole study of climatic and vegetation zones, of seasonal changes, and of human dependence upon these basic conditions of life is not given the central place that it deserves. Not that it is omitted. Mr. Grabham contributes an article upon "The Physical Setting," Professor Evans-Pritchard makes use of the work done upon vegetation belts by Drs. Hurst and Phillips (p. 79), and both Sir H. MacMichael and Mr. G. D. Lampen refer to the practice of transhumance among the Baggara, or nomadic cattle-owning Arab tribes (pp. 58-130). But a chapter by a human geographer, who fully grasped the nature of the mutual connection between rainfall, crops, soil, and human economy, would have thrown a flood of light, as only science can, upon the vast congeries of different tribes and their changing habitat, that together make up the Sudan.

G. O. WHITEHEAD.

Fact and Fiction: A Short Account of the Natives of Southern Rhodesia. By F. W. T. Posselt. Foreword by Sir Herbert Stanley, G.C.M.G. Rhodesian Printing and Publishing Co., Ltd., Bulawayo, 1935. 210 pp., illustrated. Price 9s. 6d.

In his selection of title Mr. Posselt has done himself and his material something of a dis-service. As the Governor of the territory points out in his Foreword there are included 'things of legendary basis' as well as things of 'verifiable fact,' but to label the folk-lore of a people 'fiction' thus badly is to do them and their 'literature' something less than justice. Actually what the author gives us here is a collection of his notes upon a group of south-eastern Bantu and much of the material is genuinely interesting and useful. It deserves a less snappy and more truly descriptive title.

Mr. Posselt does not rely merely upon his own personal contacts and research, but utilizes most fully much of the available information from the Portuguese period onwards. His book aims at being something of a short, introductory Primer for ordinary readers, and succeeds in this aim. Nothing could be more happy than that at this time when the ordinary men and women in our colonies are beginning to feel some measure of personal interest in the indigenous peoples, those of this particular territory should have a book like this made available. Others, both to the south and to the north of Southern

Rhodesia will find material of interest here, and if this introduction to peoples of antecedents so different from 'our own' leads to further desire for closer study and produces additional readers for such recent work, say, as Stayt's 'The Bavenda,' it will be all to the good.

Experience, indeed long experience, in the work of the Native Department gives Mr. Posselt the right to hold strong opinions. One such may be quoted here:—

"Even in our prided forms of administering justice we are not understood: in fact, the very opposite of justice is how the Native regards much that our law sanctions or enjoins. Our complicated trials with pleas and exceptions and cross-examinations are mysteries to him; and if the prisoner is sent to prison, the complainant goes away empty handed, which he regards as a grievous wrong." This is well said.

Elsewhere there are statements which suggest rather an uncritical and unformed acceptance of a good deal of the conventional chit-chat about 'education and how it spoils the native,' and so forth. But on the whole Mr. Posselt is content to hand on the result of his many years of close contact, plus the results of his parallel reading from other authorities, as his contribution to the wider spread of knowledge and sympathy. There will, we hope, be many who will be grateful to him in the territory that he loves.

CULLEN YOUNG.

African Ways and Wisdom. By T. Cullen Young. **African Dilemma.** By Frank Melland and Cullen Young. London: The United Society for Christian Literature, 1937. 144 pp.; 171 pp. 4s. 6d.; 6s.

Each of these books contains a chapter on Anthropology; the first, written by Cullen Young, addressed to missionary students and giving excellent reasons why they should study it; the second, written by F. Melland, addressed to the general public after the Congress of 1934. Cullen Young's book is based upon lectures given to missionary students but contains much that should attract other people. His thesis is that African wisdom recognizes one principle only for successful living: the principle of the clan, of comradeship; and that it weighs all new things on that scale. The idea is worked out in an interesting and even arresting manner, with constant reference to the author's experience in Nyasaland. The second book is chiefly made up of essays which have been published elsewhere. It contains much relevant criticism of European dealings with the African, especially in regard to the Law. Mr. Melland states once again his views on the attitude of Governments towards the witch and the diviner and Cullen Young has a chapter on 'Can we collaborate with the witch-doctor?' The latter also writes on Hut-tax revision *à propos* of the Nyasaland Commission. This is a book that students of the changing African cannot afford to ignore.

E. W. S.

GENERAL.

The Irish Countryman. By Conrad M. Arensberg, Ph.D. London, Macmillan & Co., 1937. xi + 216 pp. Price 10s. 6d.

The six lectures comprised in this book are important as an instance of the application of the methods of the functional school of anthropologists to people of western Europe, a more difficult undertaking than that of applying them to the study of primitive societies. Regarded, however, as a new departure of this kind, Dr. Arensberg's essay is on the whole eminently successful. His first lecture contains a justification of the functional school's view of anthropology as the study of man's behaviour in society from which it follows that applied anthropology can no longer recognize any valid barrier between civilized and barbarous man, though a

primitive society being usually numerically small, life in such a society can be studied in minuscule and dynamic functions more easily described. Anthropology, we are told, 'has become . . . an operational science. . . .

"If the anthropologist avoids all explanations except those which arise out of his observations of what men do, and if he accepts them only when he can test them again against observed behaviour, he will be, if only imperfectly, in the main line of scientific development."

The difficulty in accepting as sufficient this view of anthropology is that the causes for human behaviour are continually changing without a corresponding degree of change in the behaviour caused. A practice may, indeed, continue apparently unchanged, though the reasons for which it was started have ceased entirely

and new reasons not inherent in the old ones nor in the practice itself may be adopted to justify its continuance. The functional explanation therefore is at best incomplete, and may even be misleading. In any case it cannot be justly compared with observations made on the behaviour of chemical or physical constants.

The next four lectures are taken up with an admirable account of the Irish peasant of the west, the mountainy man, that is, who offers as good an instance as could be found of the survival of the early type of small mixed farming, for home consumption and dependent on family labour, a type surviving from the pre-Roman age of Europe and from very far behind that. The author is particularly interesting on the credit system of rural Ireland and gives a satisfying explanation of the Irish peasant's attitude towards rent (when owed even to a popular landlord) so puzzling when compared with his punctilious honesty in regard to his debts to the local gombeen-man. An interesting point in passing is the

number of parallels with India; to quote one only, boys are protected from the fairies by dressing them in girls' clothes. Fairies appear generally to be hardly other than the ghosts of the dead.

In the sixth lecture the author extends to folklore the principles of the functional school, his interest lying "not so much in the minutiae of folk-belief as in the part "the scheme of thought they make up plays in customary conduct." Here the author is on more dangerous ground, and when he estimates the value of folklore at "the part established association plays in psychological "balance," he must be left to psychologists to deal with. At any rate we find it difficult of credit that a belief in fairies, or ghosts, so numerous that "every rock down "below was covered with people sitting on it" is really an emotional force necessary to the daily life of even a fisherman in County Clare.

On the whole, however, the author of this book is justified by works, if not by faith. J. H. H.

CORRESPONDENCE.

Prehistoric Remains on Historic Sites: a Reply.

232 (Cf. MAN, 1937, 185.)
SIR,—I have read Mlle. Corbiau's letter with the greatest interest, in particular her fifth section which appears to me to get to the very root of our difficulties. Chronology requires some kind of framework, and though many may be satisfied with their own ideas of chronology, it must honestly be admitted that the framework is shaky and the ideas are often contradictory.

In India guidance is afforded by sculpture which may be dated with a considerable degree of accuracy by inscriptions as far back as 250 B.C., though, as Mr. Codrington has pointed out, the sculptural remains of Mauryan date are few and far between, making parallels and inferences uncertain.

Once one launches out from the relatively safe anchorage of the Asokan edicts and pillar capitals one is exploring as yet uncharted seas, the next point being of the nature of a position plotted in mid-ocean rather than a sight of terra firma, this is the arrival of the Aryans which, following Dr. Fábri, I will place at c. 1800 B.C. Progressing from here we reach the Indus Valley Civilization making our land-fall at the lowest limit yet allowed for the Jhukar culture at Chanhudaro, namely, 2200 B.C., and pass on to a momentarily fixed date of c. 2700 B.C. for the Harappa culture, based principally on the evidence of Dr. Frankfurt's finds at Eshnunna and elsewhere.

Where are the remains which can be dated to fill the gap from 2200 B.C. to 250 B.C.? And provided the Jhukar culture or the (as yet rather hazy) Jhangar culture can be extended to cover the period down to 1800 B.C. did all cease on that instant? However low the culture of the invading Aryans, and however devastating their impact on the dwellers in the Indus Valley and the Punjab, it is inconsistent with all experience of similar invasions that they should have left no traces, and that the indigenous culture perished immediately and utterly; some of the objects now being found must date from the time covered by this lapse of 1,500 years, but agreement as to which—that is our first difficulty.

The second difficulty, which is at the moment the true problem of Indian terracottas, is their great diversity of style. Fortunately examples covering most types have been found at Taxila, and it may soon become possible to place them all, at least in their correct sequence.

There are other problems. An object which has not been satisfactorily explained is the bronze adze-axe found at Mohenjo-daro. Adze-axes of this type are

found at Maikop where they are dated about 2100 B.C., in Crete 2000 B.C., and spread through eastern and central Europe 2000-1800 B.C. It has been regarded as a steppe-dweller's weapon, and is associated to a certain extent with the early spread of the Indo-Europeans. The weapon in question appears to be an elegant and developed type, and Prof. Gordon Childe's equation with Tepe-Hissar III indicates a date of c. 1750 B.C. instead of 2500, which seems to be the lowest date now allowable to anything from that site.

At Sari Dheri, on the other hand, I have found an octagonal stone mace-head, but these maces, though prevalent at a period of great antiquity, had a long vogue and are not easily dated.

This brings me to the third difficulty that confronts us, and which, I feel, will prove to be the clue to the whole matter; this is the survival of types and motifs both artistic and utilitarian in the 'unchanging East.' Mesopotamian art motifs of 3500 B.C., as has been shown by Dr. Fábri, have survived in India up to the Gupta period, this is born out most strongly by many of the paintings found by me in the rock shelters of the Mahadeo Hills. Mr. Mackay has shown in *J.R.A.I.*, LX (1930), the survival of painted pottery patterns in Sind; similar painted pottery is produced in Mardan, N.W.F.P.; and I hope to be able to publish examples with comparisons.

Mlle. Corbiau objects to my statement that the Khafaje figurine is the only example of applied and incised eyes outside the Charsadda-Taxila area. It must be understood that this technique consists in applying a small disc of clay to the already somewhat dry surface of the face and then incising it horizontally from nose to ear, the prolongation of the incising stroke where found being invariably towards the rear. The eyes of the Kish figure are not produced in this way; in common with others from Khafaje they are worked up in the modelling of the face and then incised. The figure from Rakka shown in *ESA*, X, p. 92, may have incised or indented eyes, but the drawing is not clear enough to show this definitely; no indication other than 'vorgeschichtlichen Zeit' is given as to date. Figures of the Harappa Culture, with the exception of the one instanced, all have round applied eyes, either plain or with a dot in the centre. The technique in question is the rule at Sari Dheri; other eye styles are extremely rare; elsewhere outside the Charsadda-Taxila area the reverse is the case to a marked degree.

In Iraq, 1937, Mlle. Corbiau has pursued that very

dangerous pastime of comparing objects widely separated by space, having a superficial resemblance one with the other, and concluding that they must be closely placed in time. Her digging at Sari Dheri, some of which I witnessed, was (I understood) of a trial nature; it was certainly quite out of the question that the find-spot of any particular small object could be determined within a few feet. A Gandharan stone panel 18 inches by 10 inches was recently found at a spot in the West Mound 5 feet above ground-level, i.e., about 20 feet below mound-surface at that point.

Mlle. Corbier says that I consider that the terracottas from these sites are of Gandharan date, meaning (I presume) contemporary with the so-called Greco-Buddhist sculpture of Gandhara, that is to say, roughly, 150-350 A.D. This is not the case. The terracottas of Hellenistic appearance are in all probability the only survivals in India of the Greco-Bactrians, other than their coins, that have been discovered outside Taxila and date from 180-50 B.C. The archaic figures are possibly of Syrian derivation, through Parthia, and have a similar dating. There is a group of primitive figures and animals which appear to be just pre-Kushan, and there are definitely Indian styles of varying dates from 100 B.C. to 300 A.D.

It is to be hoped that more careful and extensive digging may yet be carried out, but with so many exact parallels obtainable at Taxila, some further steps towards a solution will, I hope, be possible.

D. H. GORDON, *Major*.

Amuletic Hands.

233 SIR.—In MAN, 1935, 84, there is a very interesting communication from Mr. G. D. Hornblower about the 'Amuletic Hand', in which the author, referring to the prints of human hands placed in caves by certain Australian tribes, says that by studying the usages of other countries we may find help to solve the problem presented by such decorated caves.

May I in this connexion draw attention to an article by Dr. A. F. G. Kerr (formerly Director-General of the Department of Agricultural Research in Siam) published in the *Journal of the Siam Society*, XVIII, 2, (1924), p. 144, under the heading of 'Note on some Rock Paintings in Eastern Siam.' The Doctor describes a find of hand-prints, and even of figures painted in red ochre, on the cliffs near some rock shelters in the district of Mukdahān, province of Nakhon Phanom, in North-east Siam, not far from the Mekhong river. Dr. Kerr, who is an Englishman, says that his hand, when placed over the hand prints, fitted them remarkably well. The present-day population in that district, which consist of Lāo Gāo (a branch of the Thai people), does not know anything of the origin of these rock paintings, nor do they reverence them in any way. This may point to a very high age. Dr. Kerr, therefore, rightly suggests that they are the handwork of some prehistoric people who formerly inhabited the rock shelters in the Mekhong valley.

As it is now generally accepted that the primitive population of Indo-China was made up of Negritos, Melanesians or Melanoid peoples, it seems reasonable to assume that the paintings are the work of such primitive people. Further to elucidate this point, it might be useful to compare the rock paintings found by Dr. Kerr with those encountered by the late Major Lunet de Lajonquière at three different places in the bay of Pangnā on the West coast of Siamse Malaya (*Bulletin de la Commission Archéologique de l'Indochine*, 1912). Comparison should also be made with the Semang Negrito paintings met with in certain caves in British Malaya.

Through such work of comparison it might also be possible to establish the origin of the paintings found in Siam and their common relations to other cave-paintings in Australia and New Guinea.

Of special interest are the human figures, represented in Dr. Kerr's article, which seem to be more natural than generally is the case with such efforts of primitive painters, whose pictures of animals often are very true to nature while those of the human beings represented are mostly grotesque and unnatural in appearance.

ERIK SEIDENFADEN, *Major*.

Hathor and the Pharaoh. (Cf. MAN, 1937, 200.)

234 SIR.—In my second article on 'Osiris and his Rites' (MAN, 1937, 200), first paragraph, I mentioned certain high-reliefs of Mycerinus in the museums of Cairo and Boston, U.S.A. May I add that the point made there is emphasized by the example in Boston in which Hathor, seated, is the centre of the group and of far higher stature than the king or the attendant goddess (of the Hare Nome); her attitude of loving protection for the king is most pronounced.

On p. 173, 1st col., par. 3, line 4, 'p. 230' should read 'p. 157.' On p. 175, 1st col., 10th line from the bottom, the first word 'Osiris' should of course be 'Isis.'

G. D. HORNBLOWER.

The Origin of the Baganda Canoe.

235 SIR.—The articles by Messrs. Huntingford and Hornell in MAN, 1937, 177, 178, are of considerable interest, expounding as they do in some detail, the various theories of the origin of the Baganda canoe. Mr. Huntingford lays great stress on the absence of an outrigger on the Baganda canoe. As far as I am aware these craft do not carry sail, and sufficient stability for use without sail is provided by the flaring sides of the canoe. It is quite reasonable to suppose that, when it was not proposed to step a mast, the use of the outrigger was discontinued.

We have the example of the Maori canoe, a long dug-out with wash-strakes but no outriggers. Arguing along Mr. Huntingford's lines we would have to say that there was no likelihood of intercourse between New Zealand and Tahiti, where double canoes, or canoes with outriggers, are used. But we have very strong evidence to the contrary; and further, the Maori did on occasion hoist a small sail. The outrigger was dropped in spite of this. Surely there is no reason why this should not have occurred on Victoria Nyanza.

I find it very hard to agree with Mr. Huntingford when he writes "Fig. 4 shows there is a distinct resemblance between the construction of a certain type of Egyptian boat and that of the Nyanza canoes." The essential feature of the Egyptian boat was that it was keelless, dovetailed together, and strengthened with a hogging-truss for strength and rigidity. The essential feature of the Baganda canoe is the comparatively heavy keel which provides strength, and which overlaps the wash-strakes to form the lower portion of the bifid prow. Even if the Egyptian prow may be regarded as bifid, the reasons for its being bifid are different.

British Museum.

ADRIAN DIGBY.

Myth and Ritual. (Cf. MAN, 1937, 170, 214.)

236 SIR.—This discussion seems to turn chiefly upon the question of the admissibility of evidence. If a writer were to state that 'there was a man' called Ahasuerus Bloggins, who had two heads, I should say that this writer was obviously unreliable, and that therefore neither the existence of Ahasuerus Bloggins, nor any other alleged fact, could be accepted on his sole authority.

On the other hand, Professor Rose, if I understand him aright, would say—'There is not the slightest reason for doubting the existence of Aphaseurus Boggins, though we may doubt whether he really had two heads.'

Speculations as to whether two-headed men were or were not real to our writer seem irrelevant to the main point at issue.

RAGLAN.

The Stone-Age Cultures of Uganda. (Cf. MAN, 1937, 184).

237 SIR.—I agree with Mr. Wayland that our views on many points differ considerably though I cannot understand why he should be at any disadvantage through not having seen our notes or collections. Though it was impracticable to submit our field journals, catalogues and other day-to-day notes to his perusal, our field reports, I venture to suggest, should have kept him informed of our work and results. And when, towards the end of our visit, it became possible for mutual examination of our notes and collections, he himself found this no longer necessary.

Mr. Wayland is right in saying that we seem to be applying identical names to different things, but only, I feel sure, in regard to the N Horizon of the Kagera 100-ft. terrace. But it is gratifying to note our agreement that part of the deposits of that terrace are of 'Gamblian' age. However, I fail to see how that can have seemed "obvious ever since the separateness of N, as distinct "from the M-N complex, was definitely demonstrated," for I know of no references to the 'N' in Mr. Wayland's reports that antedate its discovery by us. Indeed, I feel obliged to suggest, with all respect to Mr. Wayland, that he is unacquainted with the 'N', for it seems to me that what he takes to be this horizon is actually part of the much earlier 'M'. This has only recently suggested itself, after I received a letter from Professor van Riet Lowe, to which I feel sure he will not mind my referring in order to clear up a misconception.

Professor van Riet Lowe most kindly described the results of some excavation he and Mr. Wayland carried out at Nsongezi, and his drawn section of one site, together with a catalogue of implements recovered from two stone horizons, some 12 ins. apart, made it clear to me that the second, or upper, horizon, which they

regarded as the N Horizon, is actually the second part (B) of our M Horizon. During our own work we had found that the latter consists, usually, of an earlier, gravelly part containing an industry which, though of similar type, is cruder and less specialized than that in the second, or true rubble horizon which, in our opinion, really marks the dry oscillation. These two parts are almost invariably superimposed, but the varied states of preservation of the two implement series and their typology made division fairly simple. Both parts of the stone bed we refer to collectively as the M Horizon, for we do not believe that the two industries, A and B, were far removed in time; together they form the Middle Acheulean.

It is thus evident that in regard to the division of the 100-ft. terrace beds into 'Kamasian' and 'Gamblian' phases, Mr. Wayland and I are in close agreement, for we both choose the same dividing line—the rubble B just referred to—although he would appear to have mistaken it for the N Horizon. The latter is, however, an entirely different rubble, not represented, to my knowledge, at Nsongezi, but, in more favourable sections of the terrace, separated from the M Horizon by over 15 feet of false-bedded sands containing abundant Levalloisian flakes, etc. The N Horizon tools are utterly unlike those of the 'M', their nearest counterpart being some crude *coups de poing* and picks which form the bulk of the Sangoan, i.e., the Proto-Tumbian.

I had known, of course, of Mr. Wayland's correlation of the M Horizon with Oldoway Bed 3, and had followed his lead, but after comparing our own 'M' material with museum specimens of the Bed 3 industry, I could not agree that they belong to the same stage of Acheulean; in my opinion, the 'M' is not Early but Middle Acheulean, and more comparable with material from Oldoway Bed 4—i.e., about Stages 3-4. Thus, whatever the climatic significance of the reddened Bed 3 may be, I cannot regard it as of the same age as the M Horizon.

Below is my tentative correlation of the deposits under discussion.

It is only necessary for me to add that the use of the terms 'Kamasian' and 'Gamblian' here is to designate geological periods, and not times of pluviation.

T. P. O'BRIEN.

<i>Kagera 100-ft. Terrace.</i>	<i>Oldoway and Kenya.</i>
Tumbian clays (with Levalloisian).	
N Horizon sands; Levalloisian.	'Upper Gamblian'.
N Horizon Rubble; Proto-Tumbian and Levalloisian, some erosion.	'Mid-Gamblian Oscillation'?
Post-M Horizon, current-bedded, Levalloisian sands.	'Lower Gamblian'.
stream erosion?	erosion.
Sub-aqueous erosion or non-deposition; no culture.	Sub-aqueous erosion during 'Interpluvial'.
M Horizon: Middle Acheulean.	Bed 4: Upper Acheulean.
	Bed 4: Middle Acheulean.
	Bed 3: Lower Acheulean.
	Bed 2: Chellean.
Pre-M Horizon deposits; no culture.	Bed 1: Pre-Chellean (some Early Chellean)?
?	



BRITISH SCHOOL OF ARCHÆOLOGY IN JERUSALEM
SUPPLEMENTARY PAPER 4

1937

CHURCHES AT BOSRA AND SAMARIA-SEBASTE

BY

J. W. CROWFOOT, C.B.E., F.S.A.

LATE DIRECTOR OF THE BRITISH SCHOOL



I. THE CATHEDRAL AT BOSRA

1. THE CITY OF BOSRA	1
2. PREVIOUS WORK ON THE CATHEDRAL	2
3. THE EXPEDITIONS OF THE BRITISH SCHOOL	5
4. THE RECONSTRUCTION OF THE BUILDING	9
5. SOME CONCLUSIONS	18

II. A GREEK CHURCH AND MONASTERY OF S. JOHN THE BAPTIST AT SEBASTE

1. THE CULT OF S. JOHN THE BAPTIST AT SEBASTE	24
2. THE DISCOVERY OF THE CHURCH AND MONASTERY	26
3. DESCRIPTION AND ANALYSIS OF THE BUILDING	28
4. LATER HISTORY OF THE CHURCH	32
5. MINOR FINDS	38

PLATES 1-17	<i>overleaf</i>
-----------------------	-----------------

ISSUED BY THE COUNCIL AT 2 HINDE STREET
LONDON, W.1

PRICE FIVE SHILLINGS

PLATES

Frontispiece. A PAINTING FROM THE FRESCO IN THE CRYPT AT SEBASTE: see pp. 30, 37, and Plate 16c. Painted by Muriel Bentwich.

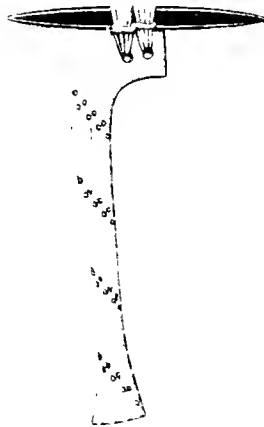
1. BOSRA CATHEDRAL FROM THE SOUTH-WEST.
 - (a) A photograph taken by an American expedition in 1875.
 - (b) A sketch by M. de Vogué in 1862.
 - (c) A restoration by A. H. Detweiler.
2. BOSRA CATHEDRAL.
 - (a) Ground-plan.
 - (b) Longitudinal section. (Both by A. H. Detweiler.)
3. BOSRA CATHEDRAL.
 - (a) The south wall from the south-west.
 - (b) The same from closer.
4. BOSRA CATHEDRAL.
 - (a) The east wall.
 - (b) The apse.
 - (c) The north-west corner.
 - (d) The west niche on the north wall, inside.
 - (e) The east niche on the north wall, after clearance.
5. BOSRA CATHEDRAL INTERIOR, LOOKING EAST.
 - (a) From the south wall to the north passage room.
 - (b) From the south side of the chancel to the north wall.
6. BOSRA CATHEDRAL EXCAVATIONS, 1935.
 - (a) Main trench, from east, showing north wall of chapel in centre, with foundations of pier on right and pedestal on left.
 - (b) The pier from east.
 - (c) The corner of the pier with the line of the colonnade running under the chapel wall, from north-west.
 - (d) The pier from the north-east.
 - (e) The pier from above.
 - (f) Two columns in the chapel, the right column standing on old pedestal still in place, from north.
7. BOSRA CATHEDRAL.
 - (a, b) Lower part of pedestal found in south colonnade in 1934, still in place.
 - (c) Upper part of pedestal re-used in foundation of south wall of chapel, 1934.
 - (d, e) Complete pedestal in east colonnade found in 1935.
8. BOSRA CATHEDRAL.
 - (a) Upper half of capital.
 - (b) Base of columns in the colonnades.
 - (c, d, e, f) Stones previously re-used in a frieze above the colonnades.
9. BOSRA CATHEDRAL.
 - (a) Fresco on the south wall of the chancel.
 - (b) Explanatory sketch of the fresco.
 - (c) Old cornice block rebuilt into north-west corner.
 - (d) Cornice block used as impost under the apse arch on the north wall of the chancel.
 - (e) Block found in debris, like that in c.
10. (a) TWO GLASS VESSELS FOUND IN GRAVE IN CENTRE OF CHAPEL AT BOSRA.
(b) VIEW OF LARGER VESSEL TO SHOW ARABESQUE ON SHOULDER.
11. PLANS FOR COMPARISON WITH BOSRA CATHEDRAL.

[Plates 12-17 illustrate the Church of S. John the Baptist at Sebaste.]

Congrès International des Sciences Anthropologiques et Ethnologiques

Deuxième Session, Copenhague 1938

*Sous le Haut Patronage
de S. M. le Roi de Danemark et d'Islande*



Nous avons l'honneur de vous inviter à assister à Copenhague, du 1^{er} au 6 Août 1938, à la deuxième réunion du Congrès International des Sciences Anthropologiques et Ethnologiques, qui sera placé sous le Haut Patronage de S. M. le Roi de Danemark et d'Islande. Au Congrès seront présentées toutes les recherches qui se rapportent aux races, aux peuples et à leurs genres de vie, c'est à dire ce qui concerne l'étude scientifique de l'homme.

Après vingt années de travaux préparatoires le Congrès a été fondé à la Conférence de Bâle, en 1933, et à sa première session, qui eut lieu à Londres en 1934, presque mille représentants d'un grand nombre de pays se rencontrèrent. A ce Congrès de Londres il fut résolu que la prochaine session aurait lieu à Copenhague, en 1938. Cette date a été fixée de sorte que les participants éventuels au Congrès International de Géographie d'Amsterdam (18—28 Juillet) puissent facilement se rendre à Copenhague. Outre que cette ville possède la plus ancienne et la plus grande université du Danemark, elle possède aussi un musée ethnographique qui est le plus ancien du monde — fondé en 1846 — et qui, avec les collections préhistoriques et historiques danoises, les collections paysannes danoises et les collections d'antiquités classiques, de monnaies et de médailles, constitue le Musée National. Après avoir été fermé durant plusieurs années en raison de travaux d'agrandissement considérables, le musée ne sera réouvert définitivement au public qu'immédiatement avant la session du Congrès afin qu'à cette occasion il soit présenté pour la première fois dans son nouvel ensemble à un cercle scientifique international.

Le Congrès est dirigé par un Conseil permanent dont les membres, comptant un maximum de quatre représentants par pays, sont secondés par un ou deux secrétaires nationaux pour chaque pays. Les vacances sont pourvues par un vote du Congrès, ratifiant les nominations faites par le Conseil permanent. L'organisation de la session à Copenhague a été confiée à un comité danois dont les noms des membres figurent ci-dessous.

Il est proposé de diviser les travaux du Congrès en sections de la façon suivante:

A. *Anthropologie physique.*

- (a) Anthropologie anatomique et biotypologie (Président: le professeur H. M. Hou-Jensen. Sujets de discussion proposés: Relations mutuelles de parenté des hominides fossiles; la méthodologie; la conception de la »race« en anthropologie).
- (b) Anthropologie physiologique et hérédité (Président: le professeur Oluf Thomsen. Sujet de discussion proposé: Propagation géographique des types de sang chez l'homme et leur présence dans le règne animal.)

B. *Psychologie.* (Président: le professeur Edgar Rubin. Sujet de discussion proposé: Influence des facteurs de civilisation sur le caractère; discussion commune de Sections B et F sur les changements culturels).

C. *Démographie.* (Président: le docteur Mads Iversen. Sujet de discussion proposé: Les mouvements de la population envisagée spécialement au point de vue de la natalité et de la mortalité).

D. *Ethnologie.* (Président: le professeur Gudmund Hatt. Sujet de discussion proposé: Origine et développement de l'agriculture et de l'élevage de bétail. Origine des plantes cultivées et des animaux domestiques).

E. *Ethnographie.*

- (a) Ethnographie et folklore de l'Asie. (Président: le conservateur de musée C. G. Feilberg. Sujet de discussion commune des sections E a et E b: Les peuples nomades-pasteurs en Asie et en Afrique).
- (b) Ethnographie africaine. (Président: M. Carl Kjerfve. Sujet de discussion proposé: Voir section E a.)
- (c) Ethnographie américaine. (Président: le professeur Frans Blom. Sujet de discussion proposé: L'influence réciproque des civilisations de l'Amérique centrale et celles de l'Amérique du Nord et du Sud).
- (d) Ethnographie océanienne. (Président: le conservateur de musée Helge Larsen. Sujet de discussion proposé: Les relations culturelles de l'Océanie et de l'Asie du Sud-Est).
- (e) Ethnographie arctique. (Président: le docteur Therkel Mathiassen. Sujet de discussion proposé: Courants préhistoriques et historiques de civilisation dans la région circumpolaire)
- (f) Ethnographie et folklore de l'Europe. (Président: le conservateur de musée J. Olrik. Sujet de discussion proposé: Croyances et coutumes concernant l'année agricole).

F. *Sociologie et religion.* (Président: le professeur Vilh. Grønbech. Sujet de discussion proposé: Dans quelle mesure l'archéologie et la préhistoire peuvent-elles servir de base à l'étude de la culture intellectuelle? Discussion commune de Sections F et B sur les changements culturels).

G. *Linguistique et écriture.* (Président: le professeur Viggo Brøndal. Sujets de discussion proposés: Standardisation des langues indigènes; formation de langues communes — langues créoles et langues de civilisations parlées par les peuples indigènes).

Les sections du Congrès se réuniront:

- (1) Le matin, pour les communications spéciales;

- (2) l'après-midi, pour les conférences et les discussions des questions d'intérêt plus général;
- (3) à cinq heures du soir, pour des sessions communes de deux ou de plusieurs sections, des conférences et des exposés d'ordre général.

Dans chaque section les communications seront groupées, autant que possible, selon la région géographique à laquelle elles se réfèrent. Chaque discussion sera ouverte par une communication d'un ou de deux savants de compétence reconnue. En dehors des questions indiquées ci-dessus, d'autres sujets de discussions ne sont pas exclus. *Les communications déjà publiées, sauf dans des cas spéciaux, ne seront pas acceptées par le comité d'organisation du Congrès.*

Pendant la session auront lieu des expositions et des démonstrations, relatives aux sujets traités au Congrès, entre autres :

- (1) du matériel anthropologique des Esquimaux, des Scandinaves du Groënland au Moyen Age, de tombeaux préhistoriques du Danemark, des crânes de Lagoa Santa (Brésil).
- (2) au Musée Rural de Lyngby, près de Copenhague, où on expliquera le rapport des vieilles constructions danoises et du système de construction préhistorique; là également seront exécutées des danses nationales danoises (y compris celles des îles Féroë).
- (3) des livres rares et manuscrits, entre autres les manuscrits islandais médiévaux traitant de la découverte du Groënland et du Vinland; du manuscrit de Poma de Ayala sur le royaume des Incas au Pérou; des manuscrits Avesta iraniens, etc. etc.

Après le Congrès sera organisée une grande excursion à travers le Danemark, au cours de laquelle il y aura l'occasion à voir une série de vestiges de l'Antiquité et du Moyen Age (Køkkenmøddings, tombeaux

mégolithiques, tumuli de l'âge de bronze, fortification de l'âge de fer, vaisseau viking nouvellement trouvé à Ladby, Musée de la Ville à Aarhus, etc.)

La cotisation des membres du Congrès est fixée à 30 couronnes danoises. La carte de membre donne le droit d'assister à toutes les réceptions, à toutes les réunions, d'y voter, de prendre part aux discussions et de recevoir les comptes-rendus gratis et les autres publications du Congrès à des prix réduits. Deux personnes, au maximum, appartenant à la famille de chaque membre auront le droit de recevoir chacune une carte de membre-associé au prix de 15 couronnes danoises par carte. Les membres-associés pourront assister aux séances, aux réceptions et aux excursions, mais n'auront ni voix, ni vote et ne recevront pas les comptes-rendus.

Si, comme nous l'espérons vivement, vous avez l'intention d'assister au Congrès, nous serons heureux de recevoir aussitôt que possible votre adhésion. En remplissant le bulletin ci-joint veuillez avoir l'obligeance d'indiquer si vous désirez recevoir ultérieurement les programmes détaillés.

Les bulletins d'adhésion et les cotisations doivent être envoyés au Trésorier du Congrès International des Sciences Anthropologiques et Ethnologiques, Nationalmuseet, 10 Ny Vestergade, Copenhague K, et toute autre communication doit être adressée aux Secrétaires Généraux du Congrès International des Sciences Anthropologiques et Ethnologiques, également au Nationalmuseum.

Thomas Thomsen,
Président du Congrès

Kjeld Rørdam,
Trésorier du Congrès.

Kaj Birket-Smith Alan H. Brodrick John L. Myres
Secrétaires Généraux du Congrès.

PRÉSIDENTS D'HONNEUR.

Th. Stauning, Président du Conseil.
D^r P. Munch, Ministre des Affaires Étrangères.
J. Jørgensen, Ministre de l'Instruction Publique.

COMITÉ D'HONNEUR DANOIS.

G. C. Amdrup, Vice-Amiral.
D^r Chr. Blinkenberg, Vice-Président de la Société Royale
des Antiquaires du Nord.
D^r C. E. Bloch, Recteur de l'Université de Copenhague.
D^r E. Buch Andersen, Recteur de l'Université d'Aarhus.
J. Bülow, Préfet de Copenhague.
J. Daugaard-Jensen, Directeur de l'Administration du
Groënland.
C. F. A. H. Graae, Directeur au Ministère de l'Instruc-
tion Publique.
Johan Hansen, Vice-Président de la Société Royale
Danoise de Géographie.
Julius Hansen, Président du Conseil Municipal de
Copenhague.
D^r E. Kaper, Maire de la Cité de Copenhague.
D^r M. Mackeprang, Directeur du Musée National.

COMITÉ D'ORGANISATION DANOIS.

Thomas Thomsen, Président.
D^r Kaj Birker-Smith, Secrétaire Général.
Kjeld Rørdam, Trésorier.
Otto Andrup.
D^r Johs. Brøndsted.
D^r Niels Nielsen.

ANNUAL CONFERENCE OF THE GEOGRAPHICAL ASSOCIATION.

TO BE HELD IN THE LONDON SCHOOL OF ECONOMICS, HOUGHTON STREET, ALDWYCH, LONDON, W.C. 2, FROM 4TH TO 6TH JANUARY, 1938.

EXHIBITIONS.

A PUBLISHERS' EXHIBITION of books, maps and appliances for the Study of Geography will be open on Tuesday, Wednesday and Thursday, and members are specially asked to visit it. In addition, there will be two exhibitions in Room 2 of interest to members: Dr. Bryan will display photographs taken during the Association's Spring Conference at Swansea: and the Land Utilisation Survey will exhibit samples of its work, in progress and completed.

SPECIAL NOTES.

A Members' Dinner will be held on Wednesday evening, 5th January, at 7.45 p.m., in the London School of Economics. Tickets, 5/6 each (including gratuities). Members obtaining tickets by post should apply before January 1st; a *stamped addressed envelope* should be enclosed with the request. Money can be refunded if Mr. Beaver is informed before the dinner is ordered—i.e., before 4 p.m. on Tuesday, January 4th, that a ticket will not be used. Mr. Beaver's address is London School of Economics, Houghton Street, Aldwych, London, W.C. 2. Evening dress optional. Tickets will be on sale up to 4 p.m. on the first day of the Conference only, and members are urged to make early application.

The Metropolitan Branches of the Geographical Association invite all members of the Association present at the Annual Conference to tea on Tuesday, 4th January, at 4.0 p.m. In order that adequate arrangements for tea may be made, it is essential that members intending to be present should obtain tickets before 2 p.m. on Tuesday, 4th January. These tickets may be obtained at the Geographical Association stall.

REFRESHMENTS may be obtained in the Refectory of the London School of Economics if sufficient numbers take advantage of the offer. Coffee and light refreshments may be obtained from 10.30 a.m. to 12 noon, hot and cold lunches from 12.30 to 2 p.m., and teas from 3.30 to 5 p.m.

REDUCED RAILWAY FARES.—*Return Tickets.* Members should purchase monthly return tickets, which are issued from all booking offices at the ordinary fare and one-third for the double journey.

Single Tickets. Members who will require single tickets should write to the Clerk, Geographical Association, c/o Municipal High School of Commerce, Princess Street, Manchester 1, for a voucher. A stamped and addressed envelope should be enclosed with the request. Single tickets at two-thirds of the ordinary fare are available on day of issue only, and are issued to members of the Association on any day between Saturday, 1st January, and Tuesday, 11th January.

PLEASE CONSULT the notice-board in the Entrance Hall for any alterations of programme.

PLEASE NOTE that correspondence about the Annual Conference or private matters must NOT be sent to the London School of Economics, correspondence for the Hon. Conference Organiser, Mr. S. H. Beaver, M.A., excepted.

TUESDAY, 4TH JANUARY, 1938.

- 10-0 a.m. Publishers' Exhibition, and exhibitions in Room 2.
- 10-15 a.m. Council Meeting.
- 11-30 a.m. Presidential Address by Prof. Patrick Abercrombie, M.A., F.R.I.B.A., entitled "Geography, the Basis of Planning."
- 2-0 p.m. Annual Business Meeting.
- 3-0 p.m. Business Meetings of the various Groups, *i.e.*, of Teachers in Secondary Schools, in Central, Senior and Primary Schools, in Public and Preparatory Schools, and in Training Colleges.
- 4-0 p.m. Tea for members, by kind invitation of the London Branches, in the Refectory. Admission by ticket only, to be obtained before 2 p.m. at the G. A. Stall.
- 5-0 p.m. Meeting of Central, Senior and Primary Group, and all other teachers interested. Lecture by Mr. A. J. Garrett, M.A., entitled "The Geographical Development of North-West London: A Study in Local Historical Geography for Schools."

WEDNESDAY, 5TH JANUARY, 1938.

- 10-0 a.m. "The Biological Approach to the Study of the Cultural Landscape." Lantern lecture by Prof. H. H. Swinnerton, D.Sc.
- 11-15 a.m. Discussion on "World Regions in Geographical Teaching." Opener: Professor J. F. Unstead, M.A., D.Sc.
- 2-0 p.m. "The Comprehension of Geographical Ideas by Children." Meeting of Training College Group and all other teachers interested to discuss further tests. Opener: Mr. T. Herdman, M.Sc.
- 3-0 p.m. "The British Ship Adoption Society and Its Work." Lecture and demonstration by Mr. S. E. Britten, Secretary of the Society.
- 4-30 p.m. Meeting of Secondary Schools Group to discuss Geography in the Sixth Form.
- 7-15 p.m. Assemble for Dinner in the Women's Common Room. Dinner at 7-45 in the "Barley Sugar" Room.

THURSDAY, 6TH JANUARY, 1938.

- 10-0 a.m. "Town and Rural Planning" : a Symposium. Dr. S. W. Wooldridge : "The Physical Factors in the Problem." Dr. E. C. Willatts : "Present Land Use as a Basis for Planning." Dr. R. A. Pelham : "The Importance of Traditional Building Styles in Rural Planning." Chairman : Prof. Patrick Abercrombie.
- 11-45 a.m. Joint Meeting with the Le Play Society. "In South Russia and the Caucasus." Lantern lecture by Sir E. John Russell, D.Sc., F.R.S.
- 2-0 p.m. Meeting of Secondary Schools Group, and all other teachers interested. Mr. J. Fairgrieve, M.A., and Dr. H. C. K. Henderson : "Marking and Standardising General School Scripts."
- 3-0 p.m. Joint Meeting with the Le Play Society Student Group. "Local Studies in Slovenia and Thuringia : Examples of Field Work." Speakers : Miss A. Garnett and Mr. N. V. Scarfe.
-

THE COUNCIL OF THE GEOGRAPHICAL ASSOCIATION.

President (1938) : Sir Thomas H. Holland, K.C.S.I., K.C.I.E., LL.D., D.Sc., F.R.S., F.G.S.

Retiring President : Professor Patrick Abercrombie, M.A., F.R.I.B.A.

Vice-Presidents : The Rt. Hon. Sir H. J. Mackinder, P.C. (Chairman).

B. B. Dickinson (Founder of the Association).

J. Fairgrieve.

H. R. Mill.

J. E. Unstead.

Trustees : Professor L. W. Lyde, The Rt. Hon. Sir H. J. Mackinder, Professor J. L. Myres.

Hon. Treasurer : Sir W. H. Himbury.

Hon. Secretary and Hon. Editor : Professor H. J. Fleure, F.R.S.

Hon. Solicitor : H. H. Lyde.

Hon. Auditor : T. C. Warrington.

Hon. Annual Conference Organiser : S. H. Beaver.

Convener of the Editorial Board : Miss R. M. Fleming.

Chairmen of Standing Committees :

Regional Surveys, L. Dudley Stamp.

Library, T. C. Warrington.

Geography in Public and Preparatory Schools, F. Debenham.

Geography in Secondary Schools, L. B. Cundall.

Geography in Central, Senior and Primary Schools, A. H. Russell.

Geography in Training Colleges, Miss A. R. Burgess.

Distribution of Traditional House-Building Materials, R. A. Pelham.

Functional Mapping in Cities, P. W. Bryan.

Pictures for Epidascopes, H. King.

Films and the Teaching of Geography, J. Fairgrieve.

Members of the Council : Misses E. K. Cook and A. Robertson, Messrs. S. E. J. Best, C. B. Fawcett, N. V. Scarfe, L. S. Suggate, L. R. Wood, S. W. Wooldridge, and branch representatives, Retiring January, 1938 : Miss G. Freeth, Dr. H. Ormsby, Messrs. J. W. Page, and C. B. Thurston.

PUBLISHERS' EXHIBITION.

The following firms will be exhibiting the latest Publications, Maps and Appliances for the study of Geography at the above Exhibition :—

Messrs. Edward Arnold & Co.	Messrs. The Lion Co., Ltd.
.. G. W. Bacon & Co. Ltd	.. Longmans, Green & Co., Ltd.
.. C. Baker. (Epidiascopes)	.. Macmillan & Co., Ltd.
.. A. & C. Black, Ltd.	.. Mapograph Co., Ltd.
The British Railways (School Journeys).	.. Methuen & Co., Ltd.
Messrs. The Cambridge University Press	.. Thomas Murby & Co.
.. Christophers	.. John Murray.
.. J. M. Dent & Sons, Ltd.	.. Newton & Co. (Epidiascopes, &c)
.. The Edinburgh House Press.	The Ordnance Survey.
.. George Gill & Sons, Ltd	Messrs. The Oxford University Press.
.. Gunn & Co., Ltd	.. George Philip & Son, Ltd.
.. Grant Educational Co., Ltd	Sir Isaac Pitman & Sons, Ltd.
.. G. G. Harrap & Co., Ltd.	Messrs. Sifton, Praed & Co., Ltd.
.. W. & A. K. Johnston, Ltd.	.. Edward Stanford, Ltd.
.. Kylograph Co.	.. University of London Press, Ltd.
The Land Utilisation Survey of Great Britain.	.. University Tutorial Press, Ltd.
	.. A. Wheaton & Co., Ltd.

CONGRÈS INTERNATIONAL DES SCIENCES ANTHROPOLOGIQUES ET ETHNOLOGIQUES

DEUXIÈME SESSION, COPENHAGUE, 1 AOÛT – 6 AOÛT 1938

BULLETIN D'ADHESION

Je, soussigné, désire être inscrit comme membre de la deuxième session du Congrès International des Sciences Anthropologiques et Ethnologiques.

J'envoie ci-inclus au Trésorier du Congrès (adresse: Nationalmuseet, Ny Vestergade 10, Copenhague) la somme de montant de la cotisation pour membre(s) et pour membre(s) associé(s)

Je m'intéresse particulièrement aux sections suivantes:

Nom (majuscule)

Adresse

Titres et Qualités

Délégué du

Je serai accompagné de (1)

(2)

qui est (sont) membre(s) de ma famille et qui désire(nt) être inscrits comme membre(s) associé(s) du Congrès.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXXVII.

JANUARY, 1937.

NO. 1-20

CONTENTS

PLATE A. 'NORMA LATERALIS' OF NGANDONG SKULL VI.

ORIGINAL ARTICLES:

ON THE FOSSIL HUMAN SKULLS RECENTLY DISCOVERED IN JAVA, AND PITHECANTHROPUS ERECTUS. PROFESSOR EUGÈNE DUBOIS. (<i>With Plate A and illustrations</i>)	1
BEAD WORKERS OF ILORIN, NIGERIA. F. DANIEL. <i>Illustrated; see also MAN, 1937, 29</i>	2
THE PORO IN MODERN BUSINESS. GEO. W. BROWN	3
TWO CIRCULAR ORNAMENTS FROM FRANCE. HENRY FIELD. <i>Illustrated</i>	4
SOCIAL CHANGE IN A WEST AFRICAN VILLAGE COMMUNITY. PROFESSOR C. DARYLL FORDE	5
A DANCE OF THE IBEX HUNTERS IN THE HADHRAMAUT. IS IT A PAGAN SURVIVAL? W. H. INGRAMS, O.B.E. <i>Illustrated</i>	6

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Myths and Dreams of the Baigas of Central India. VERRIER ELWIN	7
The Culture of the Mexican Highlands. MISS GUDA E. G. DUYVIS... ..	8
Reports from Local Correspondents. DR. W. R. MORSE, PROFESSOR BERNHARD EDUARD PETRI and O. H. BEDFORD	9

REVIEWS:

The Social System of the Zulus. E. J. KRIGZ. (<i>Cullen Young</i>)	10	A Handbook of the Rawang Dialect of the Nung Language. J. T. O. BARNARD. (<i>J. P. Mills</i>)	18
The Wisdom of the Tonga-Shangaan People. JUNOD and JAKUES. (<i>Cullen Young</i>)	10	Chinese Art. Edited LEIGH ASHTON. (<i>G. G. S.</i>)	19
Reaction to Conquest. MONICA HUNTER. (<i>Cullen Young</i>)	11	Chinese Medical Journal. (<i>L. H. D. B.</i>)	20
Native Policies in Africa. L. P. MAIR. (<i>Hilda Matheson</i>)	12	Keris and other Malay Weapons. G. B. GARDNER. (<i>C. O. Blagden</i>)	21
The Musical Instruments of the Native Races of South Africa. P. R. KIRBY. (<i>D. H. Varley</i>)	13	Totenkult und Lebensglaube bei den Völkern Ost-Indonesiens. Theo. KÖRNER. (<i>C. O. Blagden</i>)	22
African Native Music. D. H. VARLEY. (<i>L. J. P. G.</i>)... ..	14	Marriage Conditions in a Palestine Village. HILMA GRANQVIST. (<i>E. E. Evans-Pritchard</i>)	23
Land und Völker von Angola. TH. DELACHAUX and CH. E. THIERBAUD. (<i>E. D. E.</i>)	15	Die menschliche Gesellschaft in ihren ethnopsychologischen Grundlagen. R. THURNWALD. (<i>Leonard Adam</i>)	24
Costumes Algériennes. RENÉ MAUNIER. (<i>A. B. V. Drew</i>)	16	Die Verstädterung. HANS F. R. GÜNTHER. (<i>C. B. Fawcett</i>)... ..	25
Men and Gods in Mongolia. HENNING HASLUND. (<i>E. J. Lindgren</i>)	17		

CORRESPONDENCE:

The Origins of Religion. RAFAEL KARSTEN	26	Bead Workers of Ilorin, Nigeria. (<i>Cf. MAN, 1937, 2.</i>)	28
The Origins of Religion. H. J. ROSE	27	Paleolithic Objects from Crosswell Caves. A. L. ARMSTRONG	29

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1.

General Agent: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co.

And to be obtained at all Booksellers.

Monthly Number, 2/- net.

Annual Subscription, £1

MUNSHI RAM MANOHAR LAL
Oriental & Foreign Book-Sellers

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1936-1937.

President : H. S. HARRISON, D.Sc.

Vice Presidents (Past Presidents) :

H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

T. A. JOYCE, O.B.E., M.A.

Prof. SIR A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYRES, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected)

Miss M. E. DURHAM.

Prof. H. J. FLEURE, D.Sc., F.R.S.
G. D. HORNLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

H. G. BEASLEY.

H. J. BRAUNHOLTZ, M.A.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

ADRIAN DIGBY, B.A.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Prof. C. DARYLL FORDE, Ph.D.

Capt. A. W. FULLER.

Miss DOROTHY GARROD.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

C. F. C. HAWKES, M.A., F.S.A.

Miss E. J. LINDGREN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

Prof. B. MALINOWSKI, D.Sc.

G. M. MORANT, D.Sc.

Miss M. A. MURRAY, D.Litt.

R. S. RATTRAY, C.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Mrs. C. G. SELIGMAN.

Assistant Secretary : Miss K. M. MARTINDALL.

Auditors : JACKSON, PIXLEY, BROWNING, HUSEY & Co.

Bankers : COUTTS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2980.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, JANUARY, 1937.

ORDINARY MEETINGS.

Tuesday, January 12. 8.30 p.m. The Swanscombe Skull. (*Lantern and Specimen*). A. T. MARSTON, Esq., L.D.S., M.R.C.S. *Executive*, 5 p.m.

Tuesday, January 26. 8.30 p.m. The Nuer Family. (*Lantern*). DR. E. E. EVANS PRITCHARD. *Council*, 4.30 p.m.

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXXVII.

FEBRUARY, 1937.

No. 30-53

CONTENTS

PLATE B. A MODERN 'KERNOS' VESSEL OR 'MARSANÉ' FROM TIFLIS.

ORIGINAL ARTICLES:

A MODERN 'KERNOS' VESSEL FROM TIFLIS. PROFESSOR J. L. MYRES, F.B.A., D.LITT., D.Sc. (<i>With Plate B</i>)	30
A FIGURINE VASE FROM TIFLIS. PROFESSOR J. L. MYRES, F.B.A., D.Sc., D.LITT. (<i>Illustrated</i>)	31
GENETICS AND RACE. PROFESSOR R. RUGGLES GATES, F.R.S.	32
BEE-KEEPING IN THE WADI DU'AN. W. H. INGRAMS, O.B.E. (<i>Illustrated</i>)	33

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Natives of the Western Desert of Australia. NORMAN B. TINDALE	34
The Swanscombe Skull. A. T. MARSTON, L.D.S., M.R.C.S.	35
Human Remains from Kanam and Kanjera, Kenya Colony	36
The Nuer Family. DR. E. E. EVANS-PRITCHARD	37

REVIEWS:

The Red Centre. Man and Beast in the Heart of Australia. H. H. FINLAYSON. (<i>Walter Ivens</i>)	38	Die Gidyi-Ewe in Togo. DIEDRICH WESTERMANN. (<i>E. D. E.</i>)	44
Entwicklung der Menschheit von den Ur-Australien bis Europa. DR. C. TAUBER. (<i>L. H. D. B.</i>)	39	Jabo Proverbs from Liberia. GEORGE HERZOG and CHARLES G. BLOOM. (<i>E. D. E.</i>)	45
Primitive Hunters of Australia. WILFRID D. HAMBLEY. (<i>Ralph Piddington</i>)	40	Baluba et Balubaisés. VERHULPEN EDMOND. (<i>E. E. Evans-Pritchard</i>)	46
Black and White in East Africa. RICHARD C. THURNWALD. (<i>C. W. H.</i>)	41	The Real Abyssinia. C. F. REY. (<i>J. L. M.</i>)	47
Im Lande des Gada. AD E. JENSEN. (<i>E. D. E.</i>)	42	Le Livre de la Brousse, Roman. RENÉ MARAN. (<i>J. L. M.</i>)	48
The Earth Goddess. HOWARD JONES. (<i>G. P. L. Miles</i>)	43	The Mysore Tribes and Castes. DIWAN BAHADUR L. K. A. IYER. (<i>H. G. Rawlinson</i>)	49

CORRESPONDENCE:

Myth and Saga. H. J. ROSE	50	A Lolo Manuscript in the Bodleian Library, Oxford. CHUNGSHEN H. JIU	50
De Kany Prize for Egyptian Studies. G. A. WAINWRIGHT	51	Two Human Figures from South America. ARTHUR G. HEMMING. (<i>Illustrated</i>)	53

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1.

General Agent: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co.

And to be obtained at all Booksellers.

Monthly Number, 2/- net.

Annual Subscription, £1

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1936-1937.

President : H. S. HARRISON, D.Sc.

Vice Presidents (Past Presidents) :

H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

T. A. JOYCE, O.B.E., M.A.

Prof. SIR A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYRES, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected)

Miss M. E. DURHAM.

Prof. H. J. FLEURE, D.Sc., F.R.S.
G. D. HORNELOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

H. G. BEASLEY.

H. J. BRAUNHOLTZ, M.A.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

ADRIAN DIGBY, B.A.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Prof. C. DARYLL FORDE, Ph.D.

Capt. A. W. FULLER.

Miss DOROTHY GARROD.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

C. F. C. HAWKES, M.A., F.S.A.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

Prof. B. MALINOWSKI, D.Sc.

G. M. MORANT, D.Sc.

Miss M. A. MURRAY, D.Litt.

R. S. RATTRAY, C.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Mrs. C. G. SELIGMAN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIXLEY, BROWNING, HUSBY & Co.

Bankers : COURTS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2980.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, FEBRUARY, 1937.

ORDINARY MEETINGS.

Tuesday, February 9. 8.30 p.m. Death and Mourning Ceremonies at Normanby Island. DR. GEZA RÓHEIM.
(Lantern). *Executive*, 5 p.m.

Tuesday, February 23. 8.30 p.m. The Material Environment of Africans. DR. E. B. WORTHINGTON. *Council*, 4.30 p.m.

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXXVII.

MARCH 1937.

Nos. 54-70

CONTENTS

PLATE C. SIR GRAFTON ELLIOT SMITH, M.D., F.R.S., Litt.D., D.Sc., F.R.C.P.

ORIGINAL ARTICLES:

INITIATION AND HEALING. PROFESSOR A. M. HOCART	54
THE CAUSES OF GREY AND BLACK COLORATION IN PREHISTORIC POTTERY. PROFESSOR V. GORDON CHILDE, F.S.A.	55
TENURE IN THE CENTRAL CHIN HILLS OF BURMA. H. N. C. STEVENSON. <i>Illustrated</i>	56

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Death and Mourning Ceremonies at Normanby Island. DR. GEZA RÓHEIM	57
The Changing Environment of Africans. DR. E. B. WORTHINGTON	58

OBITUARY:

Grafton Elliot Smith, M.A., M.D., F.R.S., Litt.D., D.Sc., F.R.C.P. <i>With Plate C.</i> DR. MATTHEW YOUNG	59
---	----

REVIEWS:

Man Makes Himself. V. GORDON CHILDE. (<i>H. S. Harrison</i>)	60	Gesammelte kleinere Schriften zur Ethnologie und Sociologie III. S. R. STEINMETZ. (<i>A. B. V. Drew</i>)	64
of Primitive Peoples. STEPHAN VILJOEN. (<i>Rosemary Upcott</i>)	61	A Decade of Progress in Eugenics, and Scientific Papers of the Third International Congress of Eugenics. (<i>M. N. Karn</i>)	65
in Sociology of Population: A Study in Societal Relativities. BENOY KUMAR SARKAR. (<i>H. J. F.</i>)	62	The Origin of the Indo-European Races and Peoples. V. CHOCKALINGAM PILLAI. (<i>J. L. M.</i>)	66
Society and its Vital Statistics. LUDWIK KREYWICKI. (<i>A. M. Carr-Saunders</i>)	63		

CORRESPONDENCE:

Stone Age Cultures of Uganda. E. J. WAYLAND	67	University of Edinburgh: Tweedie Exploration Fellowship in Archaeology and Anthropology	70
Man and Her as Cult Animals in Arabia. SIR H. R. ALLEN. K.M.S. G.B.E. HENRY FIELD	68, 69		

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1.

Printed and Published by: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co.

And to be obtained at all Booksellers.

Single Number, 2/- net.

Annual Subscription, £1

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1936-1937.

President : H. S. HARRISON, D.Sc.

Vice Presidents (Past Presidents) :

H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

T. A. JOYCE, O.B.E., M.A.

Prof. SIR A. KEITH, M.D., LL.D. F.R.C.S., F.R.S.

Prof. J. L. MYRES, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected)

Miss M. E. DURHAM.

Prof. H. J. FLEURE, D.Sc., F.R.S.

G. D. HORNLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

H. G. BRASLEY.

H. J. BRAUNHOLTZ, M.A.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

ADRIAN DIGBY, B.A.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Prof. C. DARYLL FORDE, Ph.D.

Capt. A. W. FULLER.

Miss DOROTHY GARROD.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

C. F. C. HAWKES, M.A., F.S.A.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

Prof. B. MALINOWSKI, D.Sc.

G. M. MORANT, D.Sc.

Miss M. A. MURRAY, D.Litt.

R. S. RATTRAY, C.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Mrs. C. G. SELIGMAN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIXLEY, BROWNING, HURRY & Co.

Bankers : COURTIS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2980.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, MARCH, 1937.

ORDINARY MEETING.

Tuesday, March 16. 8.30 p.m. Bilateral inheritance and succession. Mrs. C. G. SELIGMAN and PROFESSOR C. DARYLL FORDE. Council, 4.30 p.m.

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

MAN

MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

1927

CONTENTS

PLATE II. LIVE BAIT FISHING IN ONTONG J

ORIGINAL ARTICLES:

- THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS

- THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.

OBITUARY

- THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.

REVIEWS.

- THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.

CORRESPONDENCE.

- THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.
 THE FISHING APPARATUS FROM ONTONG JARA. H. G. HEASLEY.

Published by
 THE ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND
 21, BEDFORD SQUARE, LONDON, W.C.1
 NEW YORK: THE ANTHROPOLOGICAL INSTITUTE OF AMERICA
 1215 AVENUE C, NEW YORK, N.Y.

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1936-1937.

President : H. S. HARRISON, D.Sc.

Vice Presidents (Past Presidents) :

H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D. F.R.C.S., F.R.S.

Prof. J. L. MYRES, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PRACE, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected)

Miss M. E. DURHAM.

Prof. H. J. FLURE, D.Sc., F.R.S.

G. D. HORNLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

H. G. BRASLEY.

H. J. BRAUNHOLZ, M.A.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

ADRIAN DIGNY, B.A.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Prof. C. DARYLL FORDE, Ph.D.

Capt. A. W. FULLER.

Miss DOROTHY GARROD.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

C. F. C. HAWKES, M.A., F.S.A.

Miss E. J. LINDGREN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

Prof. B. MALINOWSKI, D.Sc.

G. M. MORANT, D.Sc.

Miss M. A. MURRAY, D.Litt.

R. S. RATTRAY, C.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Mrs. C. G. SELIGMAN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PILEY, BROWNING, HURRY & Co.

Bankers : CURTIS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2390.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, APRIL, 1937.

ORDINARY MEETING.

Tuesday, April 6. 8.30 p.m. Religion and Sacrifices of the Zahan Chins (*Lantern*). H. N. C. STEVENSON, Esq.
Executive, 5 p.m.

Tuesday, April 20. 8.30 p.m. Social Symbiosis and Tribal Organization. Dr. S. F. NADIR. *Council*, 4.30 p.m.

UNIVERSITY OF EDINBURGH

Tweedie Exploration Fellowship in Archaeology and Anthropology.

About £200 p. a. for 2 years (with a possible extension). Awarded for archaeological, ethnological, sociological, or linguistic exploration and research in the less-known regions of Asia and Northern Africa. Candidates must submit a detailed project of investigation, and satisfactory evidence of their experience of such work and their capacity to undertake the particular research proposed. The fellowship is tenable along with other emoluments having a similar object. Open in June, 1937. Applications to be made to the Secretary to the University by 12th May.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

LXXVII

MAY, 1937.

No. 89-119

CONTENTS

PLATE E. ARROW-STRAIGHTENERS, THONG-SMOOTHERS AND BÂTONS-DE-COMMANDEMENT.

ORIGINAL ARTICLES:

ARROW-STRAIGHTENERS, THONG-SMOOTHERS, AND BÂTONS-DE-COMMANDEMENT. DIAMOND JENNESS. (With Plate E)	89
AGRICULTURAL METHODS IN LAHOUL, WESTERN TIBET. WALTER ASBOE	90
USSA REGALIA. D. F. HEATH. (Illustrated)	91

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Religion and Sacrifices of the Zahan Chins. H. N. C. STEVENSON... ..	92
Social Symbolism and Tribal Organization. S. F. NADEL	92
Megalithic Monuments. Boyle Somerville Manuscripts	92

OBITUARY:

Viktor Lehter, 1888-1936. G. M. M.	92
---	----

REVIEWS:

du Delta Tongkinois. PIERRE GOURNU. (Evans)	96	Religion and History. JAMES CLARK MCKERROW. (E. O. J.)	102
Esquisse d'une Étude de l'Habitation Annamite. PIERRE GOURNU. (I. H. N. Evans)	96	Mythos und Religionswissenschaft. J. WINTHUIS. (H. J. Rose)	103
The Social Economy of The Himalayans. S. D. PANT. (Rosemary Upcott)	97	The Natural History of Mind. A. D. RITCHIE. (E. J. B.)	104
A Study of Ancient Ships of Japan. Part I: Floats. SHINJI NISHIMURA. (J. H.)	98	The Hero: A Study in Tradition, Myth and Drama. LORD RAGLAN. (E. O. James)	104
Travels in Arabia Deserta. CHARLES M. DOUGHTY. (H. J. F.)	99	Vollblutneger und Halbzwerg. PAUL SCHKEST. (S. F. Nadel)	107
Iban or Sea Dayak Fabrics and their Patterns. ALFRED C. HADDON and LAURA E. STANT. (I. H. N. E.)	100	Rassenkundliche Untersuchungen an Albanern. JOSEPH WERNIGER. (L. H. D. Buxton)	107
Aftermath: A Supplement to the Golden Bough. SIR J. G. FRAZER. (H. J. Rose)	101	Unsolved Problems in Science. A. W. HASLETT. (Arthur Keith)	108

CORRESPONDENCE:

Baptism by Fire. A. M. HOCART	109	Friendship in North America. TRUMAN MICHELSON
Origin of Tri-clan and Marriage-classes in Assam. J. K. BOSE	110	Myth and Saga. LORD RAGLAN

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.

and Agent: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co.
And to be obtained at all Booksellers.

Monthly Number, 2/- net.

Annual Subscription, £1

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1936-1937.

President : H. S. HARRISON, D.Sc.

Vice Presidents (Past Presidents) :

H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D. F.R.C.S., F.R.S.

Prof. J. L. MYRES, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PRANK, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected)

Miss M. E. DURHAM.

Prof. H. J. FLINKE, D.Sc., F.R.S.
G. D. HORNELOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIFTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

H. G. BRASLEY.

H. J. BRAUNHOLTZ, M.A.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

ADRIAN DIGBY, B.A.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Prof. C. DARYLL FORDE, Ph.D.

Capt. A. W. FULLER.

Miss DOROTHY GARROD.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

C. F. C. HAWKES, M.A., F.S.A.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

Prof. B. MALINOWSKI, D.Sc.

G. M. MORANT, D.Sc.

Miss M. A. MURRAY, D.Litt.

R. S. RATTRAY, C.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Mrs. C. G. SELIGMAN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIXLEY, BROWNING, HUSKY & Co.

Bankers : COUTTS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2980.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, MAY, 1937.

ORDINARY MEETINGS.

Tuesday, May 4. 8.30 p.m. The Torguts of Etsin-gol (Inner Mongolia). (*Lantern*). DR. GÖSTA MONTELL.
Executive, 5 p.m.

Tuesday, May 25. 8.30 p.m. A Comparison of the Systems of Primitive Economic Organization. DR. KALLERVO
OBERG. *Council*, 4.30 p.m.

Bantu-Speaking Tribes of South Africa

Edited by I. SCHAPERA

This book constitutes the first satisfactory manual of South African ethnography yet published.

Illustrated.

KEGAN PAUL

2ls. net.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXXVII

JUNE, 1937.

Nos. 112-121

CONTENTS

PLATE F. AN ANCIENT HUMAN SKULL FROM SIAM.

ORIGINAL ARTICLES:

- SOME ANCIENT HUMAN SKELETONS EXCAVATED IN SIAM. H. G. QUARITCH WALES, M.A., Ph.D. (*With Plate F*) 113
THE NATIVES OF MOUNT HAGEN, PAPUA: FURTHER NOTES. F. E. WILLIAMS. (*Illustrated*) ... 114
A METHOD OF BEAD-MAKING PRACTISED IN THE GOLD COAST. R. P. WILD. (*Illustrated*) ... 115
BRITISH AND SAXON FUSION. SIR FLINDERS PETRIE, D.C.L., F.R.S. ... 116

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

- A Comparison of Three Systems of Primitive Economic Organization. DR. KALervo OBERG ... 117
Human and Other Remains in the 100-ft. Terrace at Swanscombe ... 118

PROCEEDINGS OF OTHER SOCIETIES:

- International Congress of Anthropological and Ethnological Sciences. *Meeting of the Permanent Council: Paris, 8 May, 1937* 119

OBITUARY:

- Dewan Bahadur Dr. L. K. Ananthakrishna Iyer, 1861-1937 (*Portrait*). A. C. HADDON; F. J. RICHARDS ... 120

REVIEWS:

- Tribal Distribution in Washington. LESLIE SPIER. (*Barbara Aitken*) ... 121
Milla, Town of the Souls. ELSIE CLEWS PARSONS. (*Richard C. E. Long*) ... 122
An Historical Legend of the Zapotecs. PAUL RADIN. (*Richard C. E. Long*) ... 123
Aboriginal Population of Northwestern Mexico. CARL SAUER. (*Richard C. E. Long*) ... 124
Uto-Aztecan Languages of Mexico. A. L. KROEBER. (*Richard C. E. Long*) ... 125
The Web of Thought and Action. H. LEVY. (*E. E. Evans-Pritchard*) ... 126
Plant and Animal Geography. MARION I. NEWBIGIN. (*G. P. L. Miles*) ... 127
The Dangers of Being Human. EDWARD GLOVER. (*J. L. M.*) ... 128

CORRESPONDENCE:

- The Stone Age Cultures of Uganda. T. P. O'BRIEN ... 129
Polyandry and Sexual Jealousy. A. AIYAPPAN ... 130
Stone Images from South America. ALFRED MÉTRAUX ... 131

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.

General Agent: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co.
And to be obtained at all Booksellers.

Single Number, 2/- net.

Annual Subscription, 4

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1936-1937.

President : H. S. HARRISON, D.Sc.

Vice Presidents (Past Presidents) :

H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D. F.R.C.S., F.R.S.

Prof. J. L. MYERS, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected)

Miss M. E. DURHAM.

Prof. H. J. FLEURE, D.Sc., F.R.S.

G. D. HORNELOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAFFE & Co.

Council :

H. G. BEASLEY.

H. J. BRAUNHOLTZ, M.A.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

ADRIAN DIGBY, B.A.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Prof. C. DARYLL FORDE, Ph.D.

Capt. A. W. FULLER.

Miss DOROTHY GARROD.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

C. F. C. HAWKES, M.A., F.S.A.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

Prof. B. MALINOWSKI, D.Sc.

G. M. MORANT, D.Sc.

Miss M. A. MURRAY, D.Litt.

R. S. RATTRAY, O.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Mrs. C. G. SELIGMAN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PICKLEY, BROWNING, HUSKEY & Co.

Bankers : COUTTS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2980.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, MAY, 1937.

SPECIAL MEETING.

Tuesday, June 8. 8.30 p.m. West African Music. Mrs. BOLTON.

ORDINARY MEETINGS.

Tuesday, June 15. 8.30 p.m. Among Nuer and Koma tribes of the Upper Nile. (Film). FRANK CORFIELD, Esq. *Council*, 6.30 p.m.

Tuesday, June 29. 8.30 p.m. Annual General Meeting. Ethnology under glass. *Presidential Address*. DR. H. S. HARRISON.

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXXVII.

JULY, 1937.

No. 132-154

CONTENTS

PLATE G. ABORIGINAL TEXTILE DESIGNS (a) SOUTH-WESTERN CHINA (b) EASTERN EUROPE.

ORIGINAL ARTICLES:

A COMPARISON OF ABORIGINAL TEXTILE DESIGNS FROM SOUTH-WESTERN CHINA WITH PEASANT DESIGNS FROM EASTERN EUROPE. CARL SCHUSTER. (<i>With Plate G</i>)	122
THE LITERATURE OF HUMAN PALÆONTOLOGY: A REVIEW OF 'FOSSILUM CATALOGUS, PARS 74, HOMINIDÆ 'FOSSILÆ' G. M. MORANT, D.Sc. (<i>Illustrated</i>)	123
AN EGYPTIAN MIRROR HANDLE IN FOSSIL BONE. D. E. DERRY, M.C., M.B., CH.B. (<i>Illustrated</i>)	124
THE SIGNIFICANCE OF THE OOLITIC LIMESTONE ESCARPMENTS IN THE LIFE OF BRONZE AGE FRANCE. MARGARET DUNLOP. (<i>Illustrated</i>)	125

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

The Torguts of Eisin-gol. DR. GÖSTA MONTELL	126
Among Nuer and Koma Tribes of the Upper Nile. FRANK CORFIELD	127
Ethnology under Glam. (<i>Presidential Address.</i>) DR. H. S. HARRISON	128
Applied Anthropology Committee	129

REVIEWS:

The Katharis: A Sociological Study of an Aboriginal Tribe of the Bombay Presidency. A. N. WELING. (<i>A. Aiyappan</i>)	140	The Mahābhārata: An Ethnological Study. G. J. HELD. (<i>J. L. M.</i>)	142
Explorations in Sind. N. G. MAJUMDAR. (<i>H. G. Rawlinson</i>)	141	British Calendar Customs: Scotland, Vol. 1. MRS. M. MACLEOD BANKS. (<i>R. A. S. M.</i>)	144
Dual Organization in Assam. J. K. BOSE. (<i>F. J. Richards</i>)	142	Nutrition Policy in the Colonial Empire. (<i>J. L. M.</i>)	145

CORRESPONDENCE:

More 'Karnes' Vessels from Tiflis. A. BYHAM	146	A Polynesian Wall of Coral in the British Solomon Islands. R. J. A. W. LEVER. (<i>Illustrated</i>)	151
JOHN L. MYRES	147	A Figurine Vase from Tiflis. D. H. GORDON	152
Primitive Hunters of Australia. WILFRID D. HAMBLY	148	Cylindrical Beehives in Egypt and Cyprus. JAMES HORNELL. (<i>Illustrated</i>)	153
RALPH PIDDINGTON	149	Bee-Keeping in the Wadi Du'an. A Correction	154
Fire-Walking. A. M. HOGART	150		

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1

General Agent: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co
And to be obtained at all Booksellers.

Monthly Number, 2/- net.

Annual Subscription, £1

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1937-1938.

President : H. J. BRAUNHOLTZ, M.A.

Vice Presidents (Past Presidents) :

Prof. H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

H. S. HARRISON, D.Sc.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KUTTE, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYERS, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PRAER, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected) :

Prof. H. J. FLEURE, D.Sc., F.R.S.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

G. D. HORNLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

M. C. BURKITT, M.A., F.S.A.

Miss G. CATON-THOMPSON.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

J. H. DEIBERG, M.A.

Miss M. E. DURHAM

E. E. EVANS PRITCHARD, M.A., Ph.D.

Capt. A. W. FULLER.

C. F. C. HAWKES, M.A., F.S.A.

Prof. J. H. HUTTON, C.I.E., D.Sc.

Miss E. J. LINDGREN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

G. M. MORANT, D.Sc.

Prof. A. R. RADCLIFFE BROWN, M.A.

LORD RAGLAN.

R. S. RATTRAY, C.B.E., D.Sc.

Miss AUDREY RICHARDS, Ph.D.

Miss M. L. TILDENLY.

S. HAZLEEDINE WARREN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIRLEY, BROWNING, HURRY & Co.

Bankers : COUTTS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2900.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part 2. July to December, 1936

CONTENTS:

Methods in Social Anthropology, Huxley Memorial Lecture, 1936, EDWARD WESTERMARCK, Ph.D., LL.D. The Endocranial Cast of the Chimpanzee, W. E. LE GROS CLARK, D. M. COOPER, S. ZUCKERMAN. The Pygmies of the Aisne Mountains, Mandated Territory of New Guinea (With Plates XVII-XX): LORD MOYNE and KATHLEEN HADDON (MRS. RISHBETH). The Spiritual Ideas and Experiences of the Tatars of Central Asia, MRS. NORA K. CHADWICK. The Antiquity of Man in Rhodesia as demonstrated by Stone Implements of the ancient Zambesi Gravel, South of Victoria Falls (With Plate XXI): A. LESLIE ARMSTRONG, M.C., F.S.A., and REV. NEVILLE JONES. The Use of Counter Irritants in the Deccan by K. de B. CODRINGTON. Notes on Red Feather Money from Santa Cruz group, New Hebrides (With Plates XXII-XXV): H. G. BEASLEY and F. L. JONES. A Nigerian Chiefdom, Some Notes, on the Igala Tribe in Nigeria and their "Divine King": introduction by Sir Richmond Palmer, K.C.M.G., C.B.E., (With Plate XXVI), MILES CLIFFORD. Proceedings of the Royal Anthropological Institute, 1936. Index.

218 pages. 9 plates, and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,

62, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXXVII.

AUGUST, 1937.

No.

CONTENTS

PLATE H. A COMPOSITE 'TAMBUA' FROM FIJI.

ORIGINAL ARTICLES:

- A COMPOSITE 'TAMBUA' FROM FIJI. KINGSLEY ROTH. (*With Plate H*)
THE CUSTOM OF TEMPORARY MARRIAGE AMONG THE EASTERN ANGAMI NAGAS OF ASSAM. J. P. MILLS
SOME OBSERVATIONS CONCERNING THE STATURE OF FRESHMEN ENTERING THE UNIVERSITY OF TORONTO,
CANADA. JOHN ALLAN
A NOTE ON THE ANGONI PARAMOUNTCY. J. M. WINTERBOTTOM, B.Sc., Ph.D.
EASTERN HIMALAYAN BLOOD-GROUPS. EILEEN W. ERLANSON MACFARLANE. (*Illustrated*)

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

West African Music. MRS. BOULTON

PROCEEDINGS OF OTHER SOCIETIES:

- Congrès International de Folklore, Paris, 23-28 August, 1937 161
Symposium on Early Man at Philadelphia: Some Impressions. V. GORDON CHILDE. 162

REVIEWS:

- Stone Age Africa: An Outline of Prehistory in Africa.
L. S. B. LEAKEY. (*G. F. C. Hawkes*) 163
Les Rites Secrets des Primitifs de l'Oubangui. A. M.
VINGIAT. (*E. D. E.*) 164
The Bantu Tribes of South Africa: Reproductions of
Photographic Studies. A. M. DUGGAN-CRONIN.
(*E. D. E.*) 165
Savage Civilization. T. H. HARRISSON. (*John Layard*) 166
Maori Music with its Polynesian Background. JOHANNES
C. ANDERSEN. (*Raymond Firth*) 167
Richard Burton, Explorer. H. J. SCHONFIELD. (*H. G.
Rawlinson*) 168

CORRESPONDENCE:

- The Fire-Piston in South India. M. D. RAGHAVAN 169
Myth and Ritual. A. M. HOCART 170
Modern Obsidian Artifacts from Southern Ethiopia.
R. H. R. TAYLOR 171
Death and Mourning Celebrations on Normanby Island.
J. H. P. MURRAY
Correction. (*Cf. MAN, 1937, 129.*) T. P. O'BRIEN

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1.

General Agent: FRANCIS EDWARDS, 83 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECHERT & Co.
And to be obtained at all Booksellers.

Monthly Number, 2/- net.

Annual Subscription, £1

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1937-1938.

President : H. J. BRAUNHOLTZ, M.A.

Vice-Presidents (Past Presidents) :

Prof. H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

H. S. HARRISON, D.Sc.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYRES, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected):

Prof. H. J. FLEURE, D.Sc., F.R.S.

Prof. R. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.
G. D. HORNBLLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

M. C. BURKITT, M.A., F.S.A.

Miss G. CATON-THOMPSON.

Prof. V. G. CHILDE, M.A., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

J. H. DREIBERG, M.A.

Miss M. E. DURHAM

E. E. EVANS PRITCHARD, M.A., Ph.D.

Capt. A. W. FULLER.

C. F. C. HAWKES, M.A., F.S.A.

W. L. HILDEBURGH, M.A., Ph.D., F.S.A.

Prof. J. H. HUTTON, C.I.E., D.Sc.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUOY MAIR, M.A., Ph.D.

G. M. MORANT, D.Sc.

Prof. A. R. RADCLIFFE BROWN, M.A.

LORD RAGLAN.

R. S. RATTRAY, C.B.E., D.Sc.

Miss M. L. TILDESLEY.

S. HAZZLEDINE WARREN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIXLEY, BROWNING, HURRY & Co.

Bankers : COUTTS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2090.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part 2. July to December, 1936

CONTENTS:

Methods in Social Anthropology, Huxley Memorial Lecture, 1936, EDWARD WESTERMARCK, Ph.D., LL.D. The Endocranial Cast of the Chimpanzee, W. K. LE GROS CLARK, D. M. COOPER, S. ZUCKERMAN. The Pygmies of the Aïzoue Mountains, Mandated Territory of New Guinea (With Plates XVII-XX): LORD MOYNE and KATHLEEN HADDON (MRS. RISHBETH). The Spiritual Ideas and Experiences of the Tatars of Central Asia, MRS. NORA K. CHADWICK. The Antiquity of Man in Rhodesia as demonstrated by Stone Implements of the ancient Zambesi Gravels, South of Victoria Falls (With Plate XXI): A. LESLIE ARMSTRONG, M.C., F.S.A., and REV. NEVILLE JONES. The Use of Counter Irritants in the Deccan by K. de B. CODRINGTON. Notes on Red Feather Money from Santa Cruz group, New Hebrides (With Plates XXII-XXV): H. G. BEASLEY and F. L. JONES. A Nigerian Chickadee, Some Notes, on the Igala Tribe in Nigeria and their "Divine King": introduction by Sir Richmond Palmer, K.C.M.G., C.B.E. (With Plate XXVI), MILES CLIFFORD. Proceedings of the Royal Anthropological Institute, 1936. Index.

218 pages. 9 plates, and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,
52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1

MAN

MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

XXVII

SEPTEMBER, 1937.

No. 174

CONTENTS

PLATE I-J. TWO NEOLITHIC IMPLEMENTS FROM FRANCE OF UNUSUAL SIZE

ORIGINAL ARTICLES:

NEOLITHIC IMPLEMENTS OF UNUSUAL SIZE. HENRY FIELD, M.A. (<i>With Plate I-J</i>)	174
CHONDRO-SOLIT CHLTS FROM BENIN. HARRY G. BEASLEY. (<i>Illustrated</i>)	176
FRANKIE POLYMERIA. ERNEST BEAGLEHOLE, M.A., Ph.D.	178
OF VICTORIA NYAKHA. I. G. W. B. HUNTINGFORD. (<i>Illustrated</i>)	180
RE ON MR. HUNTINGFORD'S PAPER. JAMES HORNELL	182
ED POTTERY FROM COCHIN STATE. K. GOVINDA MENON. (<i>Illustrated</i>)	184

PROCEEDINGS OF OTHER SOCIETIES:

Livingstone Institute of Central African Studies	186
---	-----

REVIEWS:

Africa. GEORGE MONTANDON.	181
Origine des Instruments de Musique. ANDRÉ SCHAEFFER. (<i>Douglas Varley</i>)	183
The Settlements of Frederick VI's Coast.	185

CORRESPONDENCE:

N. H. W. E. J. WAYLAND	184
Prehistoric Remains on Historic Sites of India and the Near East. SIMON COHEN. (<i>Illustrated</i>)	186

Published by

ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON

W. E. EDWARDS, 65, High Street, Marylebone, W.1. New York Agents: Messrs. G. E. STEIGER

And to be obtained at all bookshops.

Price: 2s. 6d.

Annual Subscription

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1937-1938.

President : H. J. BRAUNHOLTZ, M.A.

Vice Presidents (Past Presidents) :

Prof. H. BALFOUR, M.A., F.R.S., F.S.A.
A. C. HADDON, Sc.D., F.R.S.
H. S. HARRISON, D.Sc.
T. A. JOYCE, O.B.E., M.A.
Prof. Sir A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYERS, O.B.E., M.A., D.Sc., F.R.A., F.S.A.
H. J. E. PEAKE, M.A., F.S.A.
Prof. C. G. SELLIGMAN, M.D., F.R.S.
Rev. E. W. SMITH.

Vice Presidents (Elected) :

Prof. H. J. FLUKE, D.Sc., F.R.S.

Prof. R. RUGGLES GATYER, Ph.D., D.Sc., LL.D., F.R.S.
G. D. HORNELOWE, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRCH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

M. C. BURKITT, M.A., F.S.A.
Miss G. CATON-THOMPSON.
Prof. V. G. CHILDE, M.A., D.Litt., D.Sc., F.S.A.
L. C. G. CLARKE, M.A., F.S.A.
K. DE B. CODRINGTON, M.A.
J. H. DRIBBERG, M.A.
Miss M. E. DUNHAM
E. E. EVANS PRITCHARD, M.A., Ph.D.
Capt. A. W. FULLER.
C. F. C. HAWKES, M.A., F.S.A.

W. L. HILDBURGER, M.A., Ph.D., D.Litt., F.S.A.
Prof. J. H. HUTTON, C.I.E., D.Sc.
Miss E. J. LENDGREN, M.A., Ph.D.
Miss LUOY MAIR, M.A., Ph.D.
G. M. MORANT, D.Sc.
Prof. A. R. RADCLIFFE BROWN, M.A.
LORD RAGLAN.
R. S. RATTRAY, C.B.E., D.Sc.
Miss M. L. TILDESLEY.
S. HAZLEBINE WARREN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIXLEY, BROWNING, HURRY & Co.

Bankers : CURTIS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2880.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part 2. July to December, 1936

CONTENTS:

Methods in Social Anthropology, Huxley Memorial Lecture, 1936. EDWARD WESTERMARCK, Ph.D., LL.D. The Endocranial Cast of the Champanzee, W. E. LE GROS CLARK, D. M. COOPER, S. ZUCKERMAN. The Pygmies of the Aïme Mountains, Mandated Territory of New Guinea (With Plates XVII-XX). LORD MOYNE and KATHLEEN HADDON (MRS. RISHBETH). The Spiritual Ideas and Experiences of the Tatars of Central Asia, MRS. NORA K. CHADWICK. The Antiquity of Man in Rhodesia as demonstrated by Stone Implements of the earliest Zambesi Gravels, South of Victoria Falls (With Plate XXI). A. LESLIE ARMSTRONG, M.G., F.S.A., and REV. NEVILLE JONES. The Use of Domestic Irritants in the Decree by K. de B. GODRINGTON. Notes on Red Feather Money from Santa Cruz group, New Hebrides (With Plates XXII-XXV). H. G. BEASLEY and F. L. JONES. A Nigerian Chieftain, Some Notes on the Igala Tribe in Nigeria and their "Divine King". Introduction by Sir Richmond Palmer, K.C.M.G., C.B.E. (With Plate XXVI). MILES CLIFFORD. Proceedings of the Royal Anthropological Institute, 1936. Index.

272 pages. 9 plates, and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,
52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

MAN

MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

OCTOBER, 1937.

No. 186

CONTENTS

E. K. THE SACRED MARRIAGE IN THE RITUAL OF OSIRIS: IN THE TEMPLE OF SETI I. AT ABYDOS.

ORIGINAL ARTICLES:

- ED HIS RITES: L. G. D. HORNBLOWER, F.S.A. (With Plate K)
RED POINT IN NATAL, AND A BIG PALETTE FROM THE TRAMENVAAL. L'ABBÉ H. BREUIL,
VILLAGE IN WEST AFRICA. G. ROME BELL, M.D.
CLASSES AMONG THE CHIRUS OF ASSAM. J. K. BOSH, M.A.

PROCEEDINGS OF OTHER SOCIETIES:

- of the British Association, Nottingham, 1-8 September, 1937
Association for European Ethnology and Folklore: Edinburgh Congress, 14-21 July, 1937
British Association. Second Annual Conference Exhibition, Bristol, 23-26 July, 1937

REVIEWS:

- Lappon. K. E. SCHERKING. (G. M. 193
The Living Body: Patterns of Life; Evolution—Fact and Theory. H. G. WELLS, JULIAN HUXLEY and G. P. WELLS (C. S.). 194

CORRESPONDENCE:

- A. M. HARRIS 196
G. H. N. NUSK. (Illustrated) 197
Correction. (OJ. MAN, 1937, 186)

Published by
ANTHROPOLOGICAL INSTITUTE, 51, UPPER BEDFORD PLACE, LONDON
WARD, 25 High Street, Marylebone W.1. New York Agents: Messrs. G. E. STECH
And so to be obtained at all Bookshops.

Annual Subscription

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1937-1938.

President : H. J. BRAUNHOLZ, M.A.

Vice Presidents (Past Presidents) :

Prof. H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

H. S. HARRISON, D.Sc.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYERS, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SELLIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected) :

Prof. H. J. FLEURE, D.Sc., F.R.S.

Prof. B. RUGGLES GATES, Ph.D., D.Sc., LL.D., F.R.S.

G. D. HOKENBLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONKLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : R. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

M. C. BUKKITT, M.A., F.S.A.

Miss G. CATON-THOMPSON.

Prof. V. G. CHILDE, M.A., D.Litt., D.Sc., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

J. H. DEIBERS, M.A.

Miss M. E. DURHAM

E. E. EVANS PRITCHARD, M.A., Ph.D.

Capt. A. W. FULLER.

C. F. C. HAWKES, M.A., F.S.A.

W. L. HILDEBURGH, M.A., Ph.D., F.S.A.

Prof. J. H. HUTTON, C.I.E., D.Sc., D.Litt.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

G. M. MORANT, D.Sc.

Prof. A. R. RADCLIFFE BROWN, M.A.

LORD RAGLAN.

R. S. RATTRAY, C.B.E., D.Sc.

Miss M. L. TILDESLEY.

S. HAZELDINE WARREN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PIXLEY, BROWNING, HUSEY & Co.

Bankers : COURTIS & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2960.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part 2. July to December, 1936

CONTENTS:

Methods in Social Anthropology, Huxley Memorial Lecture, 1936, EDWARD WESTERMARCK, Ph.D., LL.D. The Endocranial Cast of the Chimpanzee, W. E. LE GROS CLARK, D. M. COOPER, S. ZUCKERMAN. The Pygmies of the Aïme Mountains, Mandated Territory of New Guinea (With Plates XVII-XX): LORD MOYNE and KATHLEEN HADDON (MRS. RISHBETH). The Spiritual Ideas and Experiences of the Tatars of Central Asia, MRS. NORA K. CHADWICK. The Antiquity of Man in Rhodesia as demonstrated by Stone Implements of the ancient Zambesi Gravel, South of Victoria Falls (With Plate XXI): A. LESLIE ARMSTRONG, M.C., F.S.A., and REV. NEVILLE JONES. The Use of Counter Irritants in the Decan by K. de B. CODRINGTON. Notes on Red Feather Money from Santa Cruz group, New Hebrides (With Plates XXII-XXV): H. G. REASLEY and F. J. JONES. A Nigerian Chiefdom, Some Notes, on the Igala Tribe in Nigeria and their "Divine King": Introduction by Sir Richmond Palmer, K.C.M.G., O.B.E. (With Plate XXVI), MILES CLIFFORD. Proceedings of the Royal Anthropological Institute, 1936: Index.

278 pages. 9 plates, and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,

52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

NOVEMBER 1962

CONTENTS

ESTLE AND PIPE-STEM FROM BRITISH COLUMBIA

ORIGINAL ARTICLES:

THE MOUNTAIN COLUMBIA: H. B. WILLIAMS, With a Note by ADRIAN DUFFY

HORNLOWER, P. A.

THE ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS

President A. R. RADCLIFFE-BROWN, M.A.

REVIEWS

- | | |
|-----|---|
| 243 | The Archaeology of Britain: E. CURRIE |
| 244 | (Review) |
| 245 | A New Archaeological Method |
| 246 | of Prehistoric Pottery and Metals |
| 247 | Review: U. VAN HIRTLOWE (N. G. B.) |
| 248 | Studies of Family Living in the United States and |
| 249 | Canada: FAITH, M. WILKINSON and C. J. |
| 250 | ZIMMERMAN (A. B. F. D.) |
| 251 | Changing Views on Marriage and Family (Glenys Ford) |
| 252 | K. P. MERCHANT (Rogers and Ford) |
| 253 | Review: R. R. MANNING (A. E. Richards) |

CORRESPONDENCE

- | | |
|-----|-------------------------------|
| 211 | Confidential M. P. P. (C. M.) |
| 212 | Review |
| 213 | Death and Mourning Ceremonies |
| 214 | (C. M. 1957-1958) (C. M.) |
| 215 | Review: Review of the Review |
| 216 | A. A. A. A. |

Published by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

Post Office Box 1111

London, W.C.1, England

Printed by

THE ANTHROPOLOGICAL INSTITUTE, 11, UPPER BEDFORD PLACE

London, W.C.1, England

Telephone: 01-637 1111

Telex: 251111

OFFICE AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1937-1938

President : H. J. BRAUERROUSE, M.A.

Vice Presidents (Past Presidents) :

Prof. H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

I. S. HARRISON, D.Sc.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYERS, O.B.E., M.A., D.Sc., F.R.S., F.S.A.

H. J. E. PEAKE, M.A., F.S.A.

Prof. C. G. SMITHMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected) :

Prof. H. J. FLEWER, D.Sc., F.R.S.

G. D. HORNFLOWER, O.B.E., B.A., F.S.A.

Prof. R. HUGHES GATES, Ph.D., D.Sc., LL.D., F.R.S.

Trustees : THE DUKE OF ABERCORN; LORD RAGLAN; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LAKE.

Hon. Editor : B. U. SAYCE, M.A.

Hon. Solicitors : KIMBER BULL, HOWLAND, CLAPPE & Co.

Council :

M. C. BURKITT, M.A., F.S.A.

Miss G. CATON-THOMPSON.

Prof. V. G. CHILDE, M.A., D.Litt., D.Sc., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

J. H. DEIBERG, M.A.

Miss M. E. DURHAM.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Capt. A. W. FULLER.

C. F. C. HAWKER, M.A., F.S.A.

W. L. HILDENBURGH, M.A., Ph.D., D.Lit., F.S.A.

Prof. J. H. HUTTON, C.I.E., D.Sc.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUCY MAIR, M.A., Ph.D.

G. M. MORANT, D.Sc.

Prof. A. R. RADCLIFFE BROWN, M.A.

LORD RAGLAN.

R. S. RATTRAY, C.B.E., D.Sc.

Miss M. L. TILDENLEY.

S. HAZELDEN WARREN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PEXLEY, BROWNING, HURRY & Co.

Bankers : Courts & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2960.

ROYAL ANTHROPOLOGICAL INSTITUTE.

LECTURES 1937-38.—It is hoped during the coming Season to make known to a wider circle of people the facilities of the Institute, and the assistance of Fellows is invited in bringing to the Meetings guests who are likely to be interested in Anthropology.

For convenience the lectures will now be classified into GENERAL SERIES and a SPECIAL SERIES. The SPECIAL SERIES will comprise lectures for the exposition and discussion of the more technical problems in any branch of Anthropology or Archaeology. In the GENERAL SERIES will appear those of a wider scope, theoretical or practical. Guests are of course welcome at lectures of both Series. It is hoped that Fellows will use the lectures of the GENERAL SERIES in particular to introduce as many visitors as possible to the work of the Institute.

SPECIMENS.—It is hoped also that Fellows who have specimens of interest will take advantage of the opportunity of displaying them from eight o'clock to half-past eight on any lecture evening. A postcard notifying the Assistant Secretary beforehand will be appreciated and will ensure facilities for display.

RAYMOND FIRTH,

Hon. Secretary.

ANNOUNCEMENTS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, NOVEMBER, 1937.

ORDINARY MEETINGS.

Tuesday, November 3, 8.30 p.m. SPECIAL SERIES. Recent Archaeological Developments in E. Africa. (Lecture A. J. H. GORDON, Hon. M.A., F.R.S., F.S.A. Reserves, 5 p.m.)

Tuesday, November 9, 8 p.m. Public Memorial Lecture. Social Evolution and Geography. (Lecture G. H. J. PEARSON, D.Sc., F.R.S.)

Monday, November 22, 8.30 p.m. Research Life and Technology of the Yami of Hoid Togo. (Lecture R. H. LANE, Hon. Council, 4.30 p.m.)

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

Vol. XXVII.

DECEMBER, 1937.

No. 232-237

CONTENTS

PLATE M. THE 'CHINEDKULAN' CANOE OF BOTEL TOBAGO.

ORIGINAL ARTICLES:

BOAT CONSTRUCTION IN BOTEL TOBAGO. E. R. LEACH. <i>With Plate M and Illustrations</i>	220
THE CHRONOLOGICAL PLACE OF THE VAULTED TOMBS AT KNOSSOS, IN RELATION TO THOSE OF EARLY MINOAN. Sir ARTHUR EVANS, F.R.S.	221
ETHNOLOGICAL CLAN RELATIONSHIPS AMONG THE KEMBA OF N.E. RHODESIA. A. I. RICHARDS. <i>Illustrated</i>	222

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Recent Archaeological Developments in South Africa. A. J. H. GOODWIN	223
---	-----

PROCEEDINGS OF OTHER SOCIETIES:

International Congress of Anthropological and Ethnological Sciences. <i>Second Session, Copenhagen, 1-6 August, 1933.</i>	224
Congress of the Turkish Historical Society. <i>Istanbul, 20-28 September, 1937.</i> JOHN L. MYERS	225

REVIEWS:

... in a Nigerian Tribe, A Study in C. K. MEKE. (<i>L. P. Mair</i>)	226	Fact and Fiction: A Short Account of the Natives of Southern Rhodesia. P. W. T. FORDELL. (<i>Cullen Young</i>)	229
... Administration in Nigeria. MARGHERY PERHAM. (<i>P. Mair</i>)	227	African Ways and Wisdom. T. CULLEN YOUNG. <i>Africa Debusse. FRANK MELLAND and CULLEN YOUNG. (E. W. S.)</i>	230
... Egyptian Sudan from within. J. H. DE G. (<i>O. O. Whitehead</i>)	228	The Irish Countryman. CONRAD M. ARNSPERGER. (<i>J. H. H.</i>)	231

CORRESPONDENCE:

... on Historic Sites: A Reply. 195.) D. H. GORDON	232	The Origin of the Baganda Canoe. ADRIAN DUFFY	233
... ERIC SMITHFADEN	233	Kyū and Kōkai. (<i>Cf. MAN, 1937, 170, 214.</i>) LORD RAGLAN	234
... in the Pharaoh. (<i>Cf. MAN, 1937, 200.</i>) HUNTER	234	The Stone-Age Cultures of Uganda. (<i>Cf. MAN, 1937, 184.</i>) T. P. O'BRIEN	235

Published by

THE ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1

FRANCIS EDWARDS, 85 High Street, Marylebone, W.1. New York Agents: Messrs. G. E. STECHERT & C

And to be obtained at all Booksellers.

Number, 2/- net.

Annual Subscription, 4

OFFICERS AND COUNCIL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1937-1938.

President : H. J. BRAUNHOLZ, M.A.

Vice Presidents (Past Presidents) :

Prof. H. BALFOUR, M.A., F.R.S., F.S.A.

A. C. HADDON, Sc.D., F.R.S.

H. S. HARRISON, D.Sc.

T. A. JOYCE, O.B.E., M.A.

Prof. Sir A. KEITH, M.D., LL.D., F.R.C.S., F.R.S.

Prof. J. L. MYERS, O.B.E., M.A., D.Sc., F.B.A., F.S.A.

H. J. E. FRANK, M.A., F.S.A.

Prof. C. G. SELIGMAN, M.D., F.R.S.

Rev. E. W. SMITH.

Vice Presidents (Elected) :

Prof. H. J. FLEURE, D.Sc., F.R.S.

Prof. R. BOGGLIES GATZ, Ph.D., D.Sc., LL.D., F.R.S.

G. D. HORNLOWER, O.B.E., B.A., F.S.A.

Trustees : THE DUKE OF ABERCORN; LORD BAGLAS; THE EARL OF ONSLOW, P.C., O.B.E.

Hon. Secretary : RAYMOND FIRTH, Ph.D., M.A.

Hon. Treasurer : H. COOTE LACE.

Hon. Editor : R. U. SATON, M.A.

Hon. Solicitors : KIMMIE BULL, HOWLAND, CLAPPE & Co.

Council :

M. C. BURKITT, M.A., F.S.A.

Miss G. CATON-THOMPSON.

Prof. V. G. CHILDE, M.A., D.Litt., D.Sc., F.S.A.

L. C. G. CLARKE, M.A., F.S.A.

K. DE B. CODRINGTON, M.A.

J. H. DEINER, M.A.

Miss M. E. DURKAN.

E. E. EVANS PRITCHARD, M.A., Ph.D.

Capt. A. W. FULLER.

C. F. C. HAWKES, M.A., F.S.A.

W. L. HILDBURGH, M.A., Ph.D., D.Lit., F.S.A.

Prof. J. H. HUTCHIN, C.I.E., D.Sc.

Miss E. J. LINDGREEN, M.A., Ph.D.

Miss LUOT MAIR, M.A., Ph.D.

G. M. MORANT, D.Sc.

Prof. A. R. RADCLIFFE BROWN, M.A.

LORD BAGLAS.

R. S. RATTRAY, C.B.E., D.Sc.

Miss M. L. TILDESHAY.

S. HARRINGTON WARREN.

Assistant Secretary : Miss K. M. MARTINDALE.

Auditors : JACKSON, PILEY, BROWNING, HURRY & Co.

Bankers : COATES & Co., 15, Lombard Street, E.C.3

Telephone : Museum 2800.

ROYAL ANTHROPOLOGICAL INSTITUTE.

LECTURES 1937-38.—It is hoped during the coming Session to make known to a wider circle of people the facilities of the Institute, and the assistance of Fellows is invited in bringing to the Meetings guests who are likely to be interested in Anthropology.

For convenience the lectures will now be classified into GENERAL SERIES and a SPECIAL SERIES. The SPECIAL SERIES will comprise lectures for the exposition and discussion of the more technical problems in any branch of Anthropology or Archaeology. In the GENERAL SERIES will appear those of a wider scope, theoretical or practical. Guests are of course welcome at lectures of both Series. It is hoped that Fellows will use the lectures of the GENERAL SERIES in particular to introduce as many visitors as possible to the work of the Institute.

SPECIMENS.—It is hoped also that Fellows who have specimens of interest will take advantage of the opportunity of displaying them from eight o'clock to half-past eight on any lecture evening. A postcard notifying the Assistant Secretary beforehand will be appreciated and will ensure facilities for display.

RAYMOND FIRTH,

Hon. Secretary.

ANNOUNCEMENT OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, DECEMBER, 1937.

ORDINARY MEETINGS.

Thursday, December 10, 8.30 p.m. GENERAL SERIES. African Ethnology and the New World Negro. Professor H. J. BRAUNHOLZ. Council, 4.30 p.m.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- La Grotte d'Isturitz II : le Magdalénien de la Grande Salle.* By Dr. Rene de Saint-Perier. Archives de l'Institut de Paleontologie Humaine. Memoire 17, 1936. Qto., pp. 140, 12 plates, 75 text figures. (In exchange.)
- Fossilium Catalogus I. Animalia* edited by W. Quenstedt. Pars. 74. *Hominidae Fossiles.* By W. Quenstedt, foreword by Dr. Davidson Black. 's-Gravenhage. Dr. W. Junk. Verlag für Naturwissenschaften, 1936. 10 x 7½; pp. 456. 3450 Dutch florins. (The Publishers.)
- Archæological Survey of the Guano Valley Region in South-eastern Oregon.* By L. S. Cressman, Ph.D., and others. University of Oregon Monograph, Studies in Anthropology, No. 1, June 1936. Pp. 47, 12 plates, 18 text figures, 2 maps, bibliography. (The Publishers.)
- Die avarischen Gräberfelder von Üllö und Kiskörös.* By Tibor Horvath. Archæologia Hungarica, XIX, 1935. Pp. 128, 48 plates, 2 plans, 35 text figures. (Purchased.)
- Trouvailles Avars de Dunapentele.* By Arnold Marosi and Nandor Fettich. Archæologia Hungarica, XVIII, 1936. Pp. 105, 8 plates, 39 text figures. (Purchased.)
- La Table de Privilèges de Brigetio.* By Etienne Paulovics. Archæologia Hungarica, XX, 1936. Pp. 68, 11 plates, 2 text figures. (Purchased.)
- Quelques Aspects de l'Organisation des Indigènes déracinés résidant en Territoire de Jadotville.* By F. Grevisse, Anvers, 1936. Pp. 68. (The Author.)
- The Bornu Sahara and Sudan.* By Sir Richmond Palmer, K.C.M.G. John Murray, 1936. 11½ x 9½; pp. 296, 30 plates, 47 illustrations, 3 maps. 42s. (The Publishers.)
- The Living Body.* By H. G. Wells, Julian Huxley, G. P. Wells. London, Cassells & Co., 1934. Science of Life Series, No. 1. Pp. 223, illustrated. 4s. (The Publishers.)
- Patterns of Life.* By H. G. Wells, Julian Huxley and G. P. Wells. London, Cassells & Co., 1934. Science of Life Series, No. 2. Pp. 239, illustrated. 4s. (The Publishers.)

UNIVERSITY OF CAPE TOWN

Lecturers in (a) English ; (b) Ethics and Politics ; (c) Italian; (d) Native Administration.

The University of Cape Town invites applications for the following lectureships vacant from 1st March, 1937 :

- (a) **English** : The work will be principally in English Language but the lecturer may also be required to give some assistance in the teaching of English Literature.
- (b) **Ethics and Politics.**
- (c) **Italian** : The lecturer will be required to teach both elementary and advanced students. Applicants should state what other Romance language or languages, if any, they are competent to teach.
- (d) **Native Administration** : The main work of the lecturer will be to assist the Professor of Social Anthropology in conducting classes on comparative Native Administration (with special reference to Africa) and on comparative Bantu Law. He may also be required to undertake part of the work in Social Anthropology and the Ethnography of Africa.

The commencing salary will be not less than £400 and not more than £475 per annum according to qualifications, viz. previous teaching or other experience and original work published. The salary of a lecturer rises by annual increments of £25 to £500, and, subject to the conditions of appointment, may rise by like increments to £600, or in certain cases to £750.

The University session commences on 2nd March; applicants should state the earliest date on which they would be able to assume duty.

Applications (in triplicate) must reach the Secretary, Office of the High Commissioner for the Union of South Africa, South Africa House, Trafalgar Square, London, W.C.2 (from whom a memorandum giving the conditions of appointment may be obtained) not later than 15th January, 1937.

THE ANTIQUARIES JOURNAL

Being the Journal of the Society of Antiquaries of London.

Published Quarterly in January, April, July, October.

CONTENTS :

January, 1937, Vol. XVII, No. 1.

Excavations at Antioch in 1936, by Sir Leonard Woolley ; The Church of Quintanilla de las Viñas, by W. M. Whitehill and A. W. Clapham ; Report on excavations at Verulamium in 1934, by A. W. G. Lowther ; Lochaneilean Castle, Inverness-shire, by Douglas Simpson ; Double-looped palstave found at Curland, near Taunton, by H. St. George Gray ; Notes ; Reviews ; Periodical Literature ; Bibliography ; Proceedings.

Price Quarterly, 5s. net.

Annual Subscription, 18s. 6d., post free.

Of all Booksellers.

Published for the Society of Antiquaries by HUMPHREY MILFORD, Oxford University Press, Warwick Square, E.C.4.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part I. January to June, 1936

CONTENTS :

Minutes of the Annual General Meeting, June 30th, 1936. Reports of the Council and Treasurer. Concerning Human Progress. (Presidential Address) : By Dr. H. S. HARRISON. A Contribution to the Physical Anthropology of the Swat and Hunza Valleys based on Records collected by Sir Aurel Stein. (With Plates I-III) : By G. M. MORANT, D.Sc. Craniology of Ireland : By G. M. MORANT, D.Sc. Coefficient of Racial Likeness and the Future of Craniometry : By R. A. FISHER. The Excavations of the Egyptian University in the Prehistoric Site at Maadi, near Cairo. (With Plates IV-VII) : By MUSTAPHA AMER, M.A. Notes on Some Bone and Stone Implements from North Queensland. (With Plates VIII-XI) : By DONALD F. THOMSON, D.Sc. Shamanism among the Tatars of Central Asia : By MRS. NORA K. CHADWICK. Rock Paintings in Bukoba District. (With Plates XII-XVI) : By R. D. H. ARUNDELL. A Study of the Geometrical Drawings from the New Hebrides : By W. PAGE ROWE. A Report of the Anthropometric Survey of the Isle of Man : By ELWYN DAVIES and PROF. H. J. FLEURE, F.R.S. The Bausi Tribal God : By ROY PHILPOT. Ngoma Ya Sheitani : By HANS KORITSCHONER. The Wellcome Medal for Anthropological Research.

222 pages, with 17 plates and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,
62, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- Nova Guinea, Resultats de l'Expedition Scientifique Netherlandaise a la Nouvelle-Guinée, Vols. IV, VII, XVI Ethnographie, 1917-1934.* (The Board of the Maatschappij ter bevordering van het Natuurkundig Onderzoek der Nederlandsche Koloniën.)
- The Dawn of the Human Mind, a Study of Palæolithic Man.* By R. R. Schmidt, translated by R. A. S. Macalister, Litt.D., LL.D. London: Sidgwick & Jackson, Ltd., 1936. 8½ × 6; pp. xxix and 256, 101 illustrations in the text, 50 plates. Bibliography. 12s. 6d. (The Publishers.)
- Centres de Style de la Sculpture Nègre Africaine, Vol. 2, Guinée Portugaise, Sierra-Leone, Libéria, Côte d'Or, Togo, Dahomey et Nigéria.* Paris: Editions Albert Morance, 1936. 11½ × 9; pp. 43, 58 plates. (The Publishers.)
- We, The Tikopia. A Sociological Study of Kinship in Primitive Polynesia.* By Raymond Firth, M.A., Ph.D., with a preface by Bronislaw Malinowski. London: George Allen & Unwin, Ltd., 1936. 9½ × 6½; pp. xxv, 605, 25 plates, 2 maps and 5 plans. 30s. (The Publishers.)
- Rassen-und-Völkerrunde, Lebensproblem der Rassen, Gesellschaften und Völker.* By Wilhelm Mühlmann. Braunschweig: Friedr Vieweg & Sohn, 1936. 9½ × 6½; pp. 506, 76 plates. RM. 44. (The Publishers.)
- The Harēm. An Account of the Institution as it Existed in the Palace of the Turkish Sultans, with a History of the Grand Seraglio from its Foundations to the Present Time.* By N. M. Penser. London: George Harrap & Co., 1936. pp. 277, 7 plates, 35 illustrations and plan. 21s. (The Publishers.)
- Art and Life in New Guinea.* By Raymond Firth. London: The Studio, Ltd., 1936. 10 × 7½; pp. 125, 80 illustrations. Bibliography. 10s. 6d. (The Publishers.)
- Canoes of Oceania.* By A. C. Haddon and James Hornell. Vol. I: *The Canoes of Polynesia, Fiji and Micronesia.* By James Hornell. Bernice P. Bishop Museum, Special Publication 27. Honolulu, 1936. 10½ × 7½; pp. 454, 312 text figures and 3 maps. (The Publishers.)
-

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Senior Lecturer in Social Anthropology.

Applications are invited for the post of Senior Lecturer in Social Anthropology, in the Department of Bantu Studies.

The Senior Lecturer will be expected to assume sole responsibility for the teaching of Social Anthropology and to take charge of the Ethnological Museum.

Assumption of Duties: 1st August, 1937, or as soon as possible thereafter.

Salary: £525 × £25 — £725, subject to 6% deduction for Provident Fund contributions (an equal amount is contributed by University and Government together). The University Council may take previous experience into account when determining the initial salary.

Transport: £60 will be allowed toward the cost of passage and first-class rail fare will be refunded for the journey from Cape Town. Half salary is payable from the date of sailing to the date of arrival in Johannesburg.

Further information and forms of application may be obtained from the Secretary, Office of the High Commissioner for the Union of South Africa (South Africa House, Trafalgar Square, London, W.C.2), with whom applications, in triplicate, must be lodged not later than 31st March, 1937.

NAVEN

A Survey of the Problems suggested by a composite picture of the culture of a New Guinea tribe drawn from three points of view.

By G. BATESON

28 plates, 6 text-figures. 18s. net

"A book which no anthropologist should neglect to study."
GEOFFREY GORER in *The Listener*

CAMBRIDGE UNIVERSITY PRESS

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part I. January to June, 1936

CONTENTS:

Minutes of the Annual General Meeting, June 30th, 1936. Reports of the Council and Treasurer. Concerning Human Progress. (Presidential Address): By Dr. H. S. HARRISON. A Contribution to the Physical Anthropology of the Swat and Hunza Valleys based on Records collected by Sir Aurel Stein. (With Plates I-III): By G. M. MORANT, D.Sc. Craniology of Ireland: By G. M. MORANT, D.Sc. Coefficient of Racial Likeness and the Future of Craniometry: By R. A. FISHER. The Excavations of the Egyptian University in the Prehistoric Site at Maadi, near Cairo. (With Plates IV-VII): By MUSTAPHA AMER, M.A. Notes on Some Bone and Stone Implements from North Queensland. (With Plates VIII-XI): By DONALD F. THOMSON, D.Sc. Shamanism among the Tatars of Central Asia: By MRS. NORA K. CHADWICK. Rock Paintings in Bukoba District. (With Plates XII-XVI): By R. D. H. ARUNDELL. A Study of the Geometrical Drawings from the New Hebrides: By W. PAGE ROWE. A Report of the Anthropometric Survey of the Isle of Man: By ELWYN DAVIES and PROF. H. J. FLEURE, F.R.S. The Baushi Tribal God: By ROY PHILPOT. Ngoma Ya Sheitani: By HANS KORITSCHNER. The Wellcome Medal for Anthropological Research.

222 pages, with 17 plates and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,

52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- Plant and Animal Geography.* By Marion I. Newbigin, D.Sc. London: Methuen & Co., 1936. 9 x 5½; pp. 298, 39 illustrations and maps. 12s. 6d. (The Publishers.)
- Roman Britain and the English Settlements.* By R. G. Collingwood and J. N. L. Myres. Oxford University Press. 8½ x 5½; pp. 513, 10 maps, bibliography, 12s. 6d. (The Publishers.)
- Rassen-und Kulturgeschichte der Negrito-Völker Südost-Asiens, Band I.* By Dr. Walter Nippold. Studien zur Völkerkunde, Band XI. Leipzig: Verlag Jordan & Gramberg, 1936. 8½ x 5½; pp. 436, bibliography and 4 maps. RM. 12. (In exchange.)
- Walkabout: A Journey in Lands between the Pacific and Indian Oceans.* By Lord Moyne. With an introduction by Dr. A. C. Haddon, F.R.S., and an appendix by Dr. A. J. E. Cave. London: William Heinemann, Ltd., 1936. 8½ x 5½; pp. 366, 108 plates. 18s. (The Author.)
- Naven: A Survey of the Problems suggested by a Composite Picture of the Culture of a New Guinea Tribe from Three Points of View.* By Gregory Bateson, M.A. Cambridge: University Press, 1936. 8½ x 5½; pp. xvii, 286, 28 plates, 6 text figures. 18s. (The Publishers.)
- Les Paysans du Delta Tonkinois, Étude de Géographie Humaine.* By Pierre Gourou. Publications de l'École française d'Extrême-Orient. Vol. XXVII. Paris, 1936: Les Éditions d'Art et d'Histoire. pp. 666, 48 plates, 125 figures in the text, 9 maps. (In Exchange.)
- Esquisse d'une Étude de l'Habitation Annamite dans l'Annam Septentrional et Central du Thanh Hoa au Binh Dinh.* By Pierre Gourou. Publications de l'École française d'Extrême-Orient. Vol. XXVIII, 1936. pp. 80, 16 plates, 35 figures in the text, bibliography. (In Exchange.)
- Durch Zentral-Sumatra.* By Alfred Maass. 2 vols. (Purchased.)
- The Economics of Primitive Peoples.* By Stephan Viljoen. London: P. S. King & Son, 1936. 8½ x 5½; pp. 282. 12s. 6d. (The Publishers.)

THE PROCEEDINGS OF THE INTERNATIONAL CONGRESS of

ANTHROPOLOGICAL AND ETHNOLOGICAL SCIENCES

FIRST SESSION: LONDON: 30 JULY—4 AUGUST, 1934

CONTENTS.—Summary of Proceedings:—Address of the President; the Rt. Hon. EARL OF ONSLOW. Addresses by Sir AUREL STERN, K.C.I.E., Professor T. C. HODSON, Dr. R. R. MARRETT, and Professor J. B. S. HALDANE, F.R.S. Abstracts of Communications to the Sections of the Congress, covering all branches of Anthropology and Ethnology. Lists of Officers, Council, Delegates of Governments, Universities and Learned Societies; Members and Associates.

Copies are now on sale to the public, price twenty-five shillings net.

350 pp. Royal Octavo.

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C.1

INVALUABLE TO MEDICAL OFFICERS, TEACHERS, ETC.

REPORT OF THE ANTHROPOMETRIC COMMITTEE OF THE BRITISH ASSOCIATION

Contains Full Instructions for Taking Measurements. Price 1s. With 33 Illustrations.

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C.1

THE ABORIGINAL INHABITANTS OF THE ANDAMAN ISLANDS

By EDWARD HORACE MAN. 12 plates. Reprinted 1932. 8s. 6d.

THE NICOBAR ISLANDS AND THEIR PEOPLE By EDWARD HORACE MAN. 10s. 6d.

DICTIONARY OF THE SOUTH-ANDAMAN LANGUAGE.

By EDWARD HORACE MAN.

With Grammatical Notes, Map Illustrations and several Appendices. Qto. pp. 294. 10s. 6d.

NICOBARESE GRAMMAR VOCABULARY PARTS 1 AND 2. By EDWARD HORACE MAN. 7s. 6d.

THE GENETICS OF ANTHROPOLOGY

are covered more fully in the

EUGENICS REVIEW

than in any other periodical in the English language

Articles in the January number include

CONTRIBUTIONS AND COMMUNICATIONS FROM

LORD HORDER, DR. ELIOT SLATER, MR. B. S. BRAMWELL, PROFESSOR R. RUGGLES GATES,
PROFESSOR J. B. S. HALDANE, MR. JULIAN HUXLEY, THE VERY REV. W. R. INGE,
DR. R. B. CATTELL, DR. S. ZUCKERMAN.

Published Quarterly, in January, April, July, and October.

PRICE THREE SHILLINGS, or TWELVE SHILLINGS A YEAR, post free.

Free to Fellows and Members

THE EUGENICS SOCIETY,
69 ECCLESTON SQUARE, S.W.1.

MACMILLAN & CO., LTD.,
ST. MARTIN'S STREET, W.C.2.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part I. January to June, 1936

CONTENTS:

Minutes of the Annual General Meeting, June 30th, 1936. Reports of the Council and Treasurer. Concerning Human Progress. (Presidential Address): By Dr. H. S. HARRISON. A Contribution to the Physical Anthropology of the Swat and Hunza Valleys based on Records collected by Sir Aurel Stein. (With Plates I-III): By G. M. MORANT, D.Sc. Craniology of Ireland: By G. M. MORANT, D.Sc. Coefficient of Racial Likeness and the Future of Craniometry: By R. A. FISHER. The Excavations of the Egyptian University in the Prehistoric Site at Maadi, near Cairo. (With Plates IV-VII): By MUSTAPHA AMER, M.A. Notes on Some Bone and Stone Implements from North Queensland. (With Plates VIII-XI): By DONALD F. THOMSON, D.Sc. Shamanism among the Tatars of Central Asia: By MRS. NORA K. GHADWICK. Rock Paintings in Bukoba District. (With Plates XII-XVI.): By R. D. H. ARUNDELL. A Study of the Geometrical Drawings from the New Hebrides: By W. PAGE ROWE. A Report of the Anthropometric Survey of the Isle of Man: By ELWYN DAVIES and PROF. H. J. FLEURE, F.R.S. The Bausi Tribal God: By ROY PHILPOT. Ngoma Ya Sheitani: By HANS KORITSCHONER. The Wellcome Medal for Anthropological Research.

222 pages, with 17 plates and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,
52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- The Earth Goddess: A Study of Native Farming on the West African Coast.* By G. Howard Jones. Royal Empire Society Imperial Studies, No. 12. London, 1936. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. vii, 205, illustrated. 12s. 6d. (The Publishers.)
- Origine des Instruments de Musique. Introduction ethnologique à l'histoire de la musique instrumentale.* By André Schaeffner. Paris: Payot, 1936. $9 \times 5\frac{1}{2}$; Illustrated, bibliography. 50 fr. (The Author.)
- Savage Civilization.* By Tom Harrison. London: Victor Gollancz, Ltd., 1937. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. 461, 99 illustrations. 16s. (The Publishers.)
- Native Education and Culture-Contact in New Guinea.* By William C. Groves. Melbourne; University Press, 1936. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. 179, bibliography. 6s. (The Australian Council for Educational Research, in association with the Oxford University Press.)
- Contributions to the Ethnography of the Kutchin.* By Cornelius Osgood. Yale University Publications in Anthropology, No. 14. (In Exchange.)
- The Anglo-Egyptian Sudan from Within.* By J. A. de C. Hamilton, M.C. London: Faber & Faber, Ltd., 1935. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. xi, 367. 10s. 6d. (Dr. Evans-Pritchard.)
- The Archaeology of Sussex.* By E. Cecil Curwen, M.A., M.B., B.Ch., F.S.A. London: Methuen & Co., 1937. $7\frac{1}{2} \times 5\frac{1}{2}$; pp. xvii, 338, 32 plates, 89 illustrations in the text. 12s. 6d. (The Publishers.)
- Cumæan Gates: A Reference to the Sixth Aeneid to Initiation Pattern.* By W. F. Jackson Knight, with Drawings by L. J. Lloyd. Oxford: Basil Blackwell, 1936. pp. xv, 190, 14 illustrations. 7s. 6d. (The Publisher.)
- The Growth of Literature.* By H. Munro Chadwick and N. Kershaw Chadwick. Vol. II: Russian Oral Literature, Yugoslav Oral Poetry, Early Indian Literature, Early Hebrew Literature. Cambridge: University Press, 1936. $9\frac{1}{2} \times 7$; pp. xvii, 783. 30s. (The Publishers.)

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part I. January to June, 1936

CONTENTS:

Minutes of the Annual General Meeting, June 30th, 1936. Reports of the Council and Treasurer. Concerning Human Progress. (Presidential Address): By Dr. H. S. HARRISON. A Contribution to the Physical Anthropology of the Swat and Hunza Valleys based on Records collected by Sir Aurel Stein. (With Plates I-III): By G. M. MORANT, D.Sc. Craniology of Ireland: By G. M. MORANT, D.Sc. Coefficient of Racial Likeness and the Future of Craniometry: By R. A. FISHER. The Excavations of the Egyptian University in the Prehistoric Site at Maadi, near Cairo. (With Plates IV-VII): By MUSTAPHA AMER, M.A. Notes on Some Bone and Stone Implements from North Queensland. (With Plates VIII-XI): By DONALD F. THOMSON, D.Sc. Shamanism among the Tatars of Central Asia: By MRS. NORA K. CHADWICK. Rock Paintings in Bukoba District. (With Plates XII-XVI.): By R. D. H. ARUNDELL. A Study of the Geometrical Drawings from the New Hebrides: By W. PAGE ROWE. A Report of the Anthropometric Survey of the Isle of Man: By ELWYN DAVIES and PROF. H. J. FLEURE, F.R.S. The Bausshi Tribal God: By ROY PHILPOT. Ngoma Ya Sheitani: By HANS KORITSCHONER. The Wellcome Medal for Anthropological Research.

322 pages, with 17 plates and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,
52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1:

THE ANTIQUARIES JOURNAL

Being the Journal of the Society of Antiquaries of London.

Published Quarterly in January, April, July, October.

CONTENTS :

April, 1937, Vol. XVII, No. 2.

Medieval paintings from Castle Acre priory, by Dr. T. Borenius;
Excavations at Julliberrie's Grave, Chilham, Kent, by R. F. Jessup; A Roman
fortified villa at Norton Disney, Lincs., by Adrian Oswald; A shaped
bone from Warren Hill, Suffolk, by J. Reid Moir; Further miscellaneous
notes on medieval English alabaster carvings, by Dr. W. L. Hildburgh;
Notes; Reviews; Periodical Literature; Bibliography; Proceedings.

Price Quarterly, 5s. net.

Annual Subscription, 18s. 6d., post free.

Of all Booksellers.

Published for the Society of Antiquaries by HUMPHREY MILFORD, Oxford University
Press, Warwick Square, E.C.4.

THE GENETICS OF ANTHROPOLOGY

are covered more fully in the

EUGENICS REVIEW

than in any other periodical in the English language

Articles in April, 1937, Vol. XXIX, No. 1 include

Some Economic Consequences of a Declining Population. JOHN MAYNARD KEYNES

Speeches at the Galton Dinner.

The Heredity of the Royal Caste.

W. T. J. GUN

The Population Problem and the Future.

D. V. GLASS

Published Quarterly, in January, April, July, and October.

PRICE THREE SHILLINGS, or TWELVE SHILLINGS A YEAR, post free.

Free to Fellows and Members

THE EUGENICS SOCIETY,
63 ECCESTON SQUARE, S.W.1.

MACMILLAN & CO., LTD.,
ST. MARTIN'S STREET, W.C.2.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- Nueva Coronica y Buen Gobierno (Codex Peruvien illustre).* By Felipe Guaman Poma de Ayala. Travaux et Memoires de l'Institut d'Ethnologie Tome XXIII. Paris, 1936; pp. xxviii, 1179. 275 fr. (In exchange.)
- Dances Magiques de Kelantan.* By Jeanne Cuisinier. Travaux et Memoires de l'Institut d'Ethnologie, Tome XXIII. Paris, 1936; pp. 209, 4 plates. 56.25 fr. (In exchange.)
- The Foundations of Roman Italy.* By Joshua Whatmough. London: Methuen & Co., 1937; pp. xviii, 420; 12 plates, 8 maps, 148 illustrations in the text. 25s. (The Publishers.)
- Rasse und Krankheit.* By Dr. Johannes Schottky. München: J. F. Lehmann, 1937; 10 × 7; pp. vii, 468; RM. 16.20. (The Publishers.)
- The Wandering Spirit: A Study of Human Migration.* By Ragnar Numelin, Ph.D., with a foreword by Dr. Edward Westermarck. London: Macmillan & Co., 1937; 10½ × 7½; pp. xvi, 375. 20s. (The Publishers.)
- The Quaternary Ice Age.* By W. B. Wright. Second Edition. London: Macmillan & Co., 1936; 8½ × 6; pp. xxv, 478; 23 plates, 155 illustrations. 25s. (The Publishers.)
- Kings and Councillors.* By A. M. Hocart. Cairo: The Egyptian University, 1936; 9½ × 6½; pp. 306. (On sale in England at Messrs. Luzac & Co., 46, Great Russell Street, W.C.1.) (The Author.) 5s.
- Les Rites secret des Primitifs de l'Oubangui.* By A. M. Vergiat. Paris: Payot, 1936; 9 × 5½; pp. 210, illustrated. 25 fr. (The Publishers.)
- Middelalderiske Byfund fra Bergen og Oslo.* By Sigurd Grieg. Oslo, 1933. A. W. Broggers Boktrykkeri A/S. Pp. 430; 376 illustrations. (H. J. Braunnholtz, Esq.)
- Patna-Gaya Report: An Account of the Districts of Bihar and Patna in 1811-1812.* By Francis Buchanan. 2 Vols. Patna: Bihar and Orissa Research Society. 10 × 6½; pp. xl, 399; 393, 20 illustrations, maps. (The Publishers.)

The Wandering Spirit

A Study of Human Migration

By RAGNAR NUMELIN, Ph.D.

With a Foreword by Dr. EDWARD WESTERMARCK

Dr. Westermarck states that this book aims at a general analysis of the reasons for the wanderings of peoples in primitive stages of civilization. It is the first investigation on a large scale into the general causes of such migrations, and is a noteworthy contribution to social anthropology. 20s. net.

The Irish Countryman

An Anthropological Study

By CONRAD M. ARENSBERG, Ph.D.

Society of Fellows, Harvard University

Students have recently realized that Ireland, lying outside the range of Roman conquest kept its native primitive culture, and the native developments from it, much longer than any other European country; and they have been concentrating on Ireland for the study of European man. Now Dr. Arensberg, an anthropologist, in this very original and interesting piece of work, applies himself to study Irish social institutions and reads and analyses facts as they exist. 10s. 6d. net.

MACMILLAN & CO. LTD., St. Martin's Street, LONDON, W.C.2

Publishers: DAVID NUTT, London - G. E. STECHERT & CO., New York - NICOLA ZANICHELLI, Bologna
FÉLIX ALCAN, Paris - AKADEMISCHE VERLAGSGESELLSCHAFT, m. b. H., Leipzig
RUIZ HERMANOS, Madrid - F. KILIAN'S NACHFOLGER, Budapest
GEORG & Co., Genève - F. MACHADO & Cia, Porto - THE MARUZEN COMPANY, Tokyo.

1937

31st Year

"SCIENTIA"

INTERNATIONAL REVIEW OF SCIENTIFIC SYNTHESIS
Published every month (each number containing 100 to 120 pages)

Editors: F. BOTTAZZI - G. BRUNI - F. ENRIQUES

General Secretary: PAOLO BONETTI

IS THE ONLY REVIEW the contributors to which are really international.

IS THE ONLY REVIEW that has a really world-wide circulation.

IS THE ONLY REVIEW of synthesis and unification of science, that deals in its articles with the newest and most fundamental problems of all branches of knowledge: scientific philosophy, history of science, scientific teaching and advancement, mathematics, astronomy, geology, physics, chemistry, biological sciences, physiology, psychology, sociology, law, economics, history of religions, anthropology, linguistics; articles sometimes constituting real and proper enquiries, such as those on the contribution given by the different nations to the advancement of science; on determinism; on the most fundamental physical and chemical questions, and particularly on relativity, on the physics of the atom and of radiations; on vitalism. "Scientia" thus studies all the main problems interesting the intellectual circles of the whole world, and represents at the same time the first successful realization of an international organization of the philosophical and scientific movement.

IS THE ONLY REVIEW that among its contributors can boast of the most illustrious men of science in the whole world.

The articles are published in the language of their authors, and every number has a supplement containing the French translation of all the articles that are not French. The review is thus completely accessible to those who know only French. (Write for a free copy to the General Secretary of "Scientia," Milan, sending a sixpence in one stamp of your country, merely to cover packing and postage.)

SUBSCRIPTION: 45 Sh.

Substantial reductions are granted to those who take up more than one year's subscription
For information apply to "SCIENTIA" Via A. De Togni, 12 - Milano (Italy)

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part I. January to June, 1936

CONTENTS:

Minutes of the Annual General Meeting, June 30th, 1936. Reports of the Council and Treasurer. Concerning Human Progress. (Presidential Address): By Dr. H. S. HARRISON. A Contribution to the Physical Anthropology of the Swat and Hunza Valleys based on Records collected by Sir Aurel Stein. (With Plates I-III): By G. M. MORANT, D.Sc. Craniology of Ireland: By G. M. MORANT, D.Sc. Coefficient of Racial Likeness and the Future of Craniometry: By R. A. FISHER. The Excavations of the Egyptian University in the Prehistoric Site at Maadi, near Cairo. (With Plates IV-VII): By MUSTAPHA AMER, M.A. Notes on Some Bone and Stone Implements from North Queensland. (With Plates VIII-XI): By DONALD F. THOMSON, D.Sc. Shamanism among the Tatars of Central Asia: By MRS. NORA K. CHADWICK. Rock Paintings in Bukoba District. (With Plates XII-XVI): By R. D. H. ARUNDELL. A Study of the Geometrical Drawings from the New Hebrides: By W. PAGE ROWE. A Report of the Anthropometric Survey of the Isle of Man: By ELWYN DAVIES and PROF. H. J. FLEURE, F.R.S. The Baushi Tribal God: By ROY PHILPOT. Ngoma Ya Sheitani: By HANS KORITSCHNER. The Wellcome Medal for Anthropological Research.

see pages, with 17 plates and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,
62, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- Egyptian Temples.* By Margaret A. Murray. (G. D. Hornblower, Esq.)
- Russian Dissenters.* By Frederick C. Conybeare. (Miss M. E. Durham.)
- Siam: 2nd Rural Economic Survey, 1934-1935.* By James M. Andrews, A.B., M.A. Cambridge, Mass.: Peabody Museum, n.d. $9\frac{1}{2} \times 6\frac{1}{4}$; pp. 369, map. (The Publishers.)
- Travels and Adventures in Eastern Africa, descriptive of the Zulus, their Manners, Customs, etc., with a Sketch of Natal.* By Nathaniel Isaacs, 1836. Vol. I. Edited, with footnotes and biographical sketch, by Louis Herrman, M.A., Ph.D. Cape Town: The Van Riebeck Society, 1936; $8\frac{1}{2} \times 5\frac{1}{2}$; pp. XXXIV, 291, 3 plates and map. 12s. 6d. (Francis Edwards, Ltd.)
- Die Indogermanen-und Germanenfrage, Neue Wege zu ihrer Lösung.* Edited by Dr. Wilhelm Koppers. Wiener Beiträge zur Kulturgeschichte und Linghistik, Jahrgang IV; Salzburg-Leipzig, 1936. pp. 787. (In exchange.)
- Stone Age Africa, an Outline of Prehistory in Africa.* By L. S. B. Leakey. London: Humphrey Milford, 1936. $7\frac{1}{2} \times 5$; pp. 218, 13 plates, 28 figures in the text. 7s. 6d. (The Publishers.)
- Hopi Journal of Alexander M. Stephen.* Edited by Elsie Clews Parsons. Parts 1 and 2. Columbia University Contributions to Anthropology, Vol. XXIII. New York: Columbia University Press, 1936. pp. xxiv, 767, ix, 650, 25 plates, 529 illustrations, 12 maps. (In exchange.)
- Suriname Folklore.* By Melville J. Herskovits and Frances S. Herskovits. With transcriptions of Suriname Songs and Musicological Analysis by Dr. M. Kolinski. Columbia University Contributions in Anthropology, Vol. XXVIII. New York: Columbia Press, 1936. pp. xx, 766, 27 plates, 7 figures in the text. (In exchange.)
- Die Sozialen Verhältnisse Indonesiens, eine Kulturgeschichtliche Untersuchung. Band I: Borneo, Celebes und Molukken.* By Dr. B. A. G. Vroklage. S.V.D. Anthropos-Bibliothek, Band IV, Heft 1, 1936. Münster: Verlag der Aschendorffschen. pp. xxx, 532, 3 maps. 21-60 mk. (In exchange.)
- Objets Rituels, Croyances et Dieux de la Chine Antique et de l'Amérique.* By Carl Hentze. Anvers: Editions de Sikkell, 1936. 4to. pp. 119; 12 plates; 230 illustrations. (The Publishers.)
- La Civilization Aïnou et les Cultures Arctiques.* By Dr. George Montandon. Paris: Payot, 1937. pp. 272, 48 plates, 110 figures in the text, 10 maps. 40 fr. (The Publishers.)
- Polish Countryside.* By Louise A. Boyd, with a contribution by Stanislaw Gorzuchowski. American Geographical Society, Special Publication No. 20. New York, 1937. (Dr. W. L. Hildburgh.)
- Pleistocene Man in Minnesota, a Fossil Homo Sapiens.* By Albert Ernest Jenks. With a chapter on the Pleistocene Geology of the Prairie Lake Region. University of Minnesota Press, Oxford University Press, 1936. 4to. pp. xiii, 197, 89 illustrations. 34s. (The Oxford University Press.)
- Zacualpa, a Study of Ancient Quiche Artifacts.* By Samuel Kirkland Lothrop. Carnegie Institution of Washington, 1936, Publication 472. 4to. pp. vi, 103, 7 plates (3 in colour), 107 text figures. (The Publishers.)
- Life in a Haitian Valley.* By Melville J. Herskovits. London: Alfred A. Knopf, inc., 1937. $9\frac{1}{4} \times 5\frac{3}{4}$; pp. 350, xix; illustrated. \$4. (The Publishers.)
- La Civilisation Aïnou et les Cultures Arctiques.* By Dr. George Montandon. Paris: Payot, 1937. $9 \times 5\frac{1}{4}$; pp. 272; 48 plates, 10 maps. 40 frs. (The Publishers.)
- Archaeological Survey of India, Annual report 1930-34; parts I and II.* (In Exchange.)
- Lehrbuch der Völkerkunde.* Edited by Prof. Dr. Konrad Theodor Preuss. Stuttgart: Ferdinand Enke, 1937. $9\frac{1}{4} \times 6\frac{1}{4}$; pp. 454; 13 plates, 1 map; RM. 25. (The Publishers.)
- Die Frau im öffentlichen Leben in Melanesien.* By Dr. Joachim Henning. Leipzig: 1936. Studien zur Völkerkunde Band 12; pp. 183. (In exchange.)
- The Irish Countryman, an Anthropological Study.* By Conrad M. Arensberg. London: Macmillan & Co. Ltd., 1937. $8\frac{3}{4} \times 5\frac{3}{4}$; pp. viii, 216. 10s. 6d. (The Publishers.)

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part I. January to June, 1936

CONTENTS:

Minutes of the Annual General Meeting, June 30th, 1936. Reports of the Council and Treasurer. Concerning Human Progress. (Presidential Address): By Dr. H. S. HARRISON. A Contribution to the Physical Anthropology of the Swat and Hunza Valleys based on Records collected by Sir Aurel Stein. (With Plates I-III): By G. M. MORANT, D.Sc. Craniology of Ireland: By G. M. MORANT, D.Sc. Coefficient of Racial Likeness and the Future of Craniometry: By R. A. FISHER. The Excavations of the Egyptian University in the Prehistoric Site at Maadi, near Cairo. (With Plates IV-VII): By MUSTAPHA AMER, M.A. Notes on Some Bone and Stone Implements from North Queensland. (With Plates VIII-XI): By DONALD F. THOMSON, D.Sc. Shamanism among the Tatars of Central Asia: By MRS. NORA K. CHADWICK. Rock Paintings in Bukoba District. (With Plates XII-XVI): By R. D. H. ARUNDELL. A Study of the Geometrical Drawings from the New Hebrides: By W. PAGE ROWE. A Report of the Anthropometric Survey of the Isle of Man: By ELWYN DAVIES and PROF. H. J. FLEURE, F.R.S. The Bausi Tribal God: By ROY PHILPOT. Ngoma Ya Sheitani: By HANS KORITSCHNER. The Wellcome Medal for Anthropological Research.

222 pages, with 17 plates and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,

52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1.

THE PROCEEDINGS OF THE INTERNATIONAL CONGRESS of ANTHROPOLOGICAL AND ETHNOLOGICAL SCIENCES

FIRST SESSION: LONDON: 30 JULY—4 AUGUST, 1934

CONTENTS.—Summary of Proceedings:—Address of the President; the Rt. Hon. EARL OF ONSLOW. Addresses by Sir AUREL STEIN, K.C.I.E., Professor T. C. HODSON, Dr. R. R. MARKEF, and Professor J. B. S. HALDANE, F.R.S. Abstracts of Communications to the Sections of the Congress, covering all branches of Anthropology and Ethnology. Lists of Officers, Council, Delegates of Governments, Universities and Learned Societies; Members and Associates.

Copies are now on sale to the public, price twenty-five shillings net.

350 pp. Royal Octavo.

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C.1

INVALUABLE TO MEDICAL OFFICERS, TEACHERS, ETC.

REPORT OF THE ANTHROPOMETRIC COMMITTEE OF THE BRITISH ASSOCIATION

Contains Full Instructions for Taking Measurements. Price 1s. With 33 Illustrations.

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C.1

THE ABORIGINAL INHABITANTS OF THE ANDAMAN ISLANDS

By EDWARD HORACE MAN. 12 plates. Reprinted 1932. 8s. 6d.

THE NICOBAR ISLANDS AND THEIR PEOPLE By EDWARD HORACE MAN . . . 10s. 6d.

DICTIONARY OF THE SOUTH-ANDAMAN LANGUAGE. By EDWARD HORACE MAN.

With Grammatical Notes, Map Illustrations and several Appendices. Qto. pp. 204. 10s. 6d.

NICOBARESE GRAMMAR VOCABULARY PARTS 1 AND 2. By EDWARD HORACE MAN. 7s. 6d.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- Traité de Langue Amharique (Abyssinie).* By Marcel Cohen. Paris: Institut d'Ethnologie, Université de Paris, Travaux et Mémoires XXIV, 1936. Pp. xv, 444, 33 tableaux. 150 fr. (In exchange.)
- Die Li-Stämme der Insel Hainan.* Ein Beitrag zur Volkskunde Südchinas. By H. Stübel. Berlin: Klinkhardt & Biermann Verlag, 1937. 11 x 8; pp. vi, 338, 260 illustrations, 1 map. (The Publishers.)
- Half-Caste.* By Cedric Dover. Preface on Prejudices by Prof. Lancelot Hogben. London: Martin Secker & Warburg, Ltd., 1937. 9 x 5½; pp. 324. 10s. 6d. (The Publishers.)
- Witchcraft, Oracles and Magic among the Azande.* By E. E. Evans-Pritchard, with a Foreword by Professor C. G. Seligman. Oxford: Clarendon Press, 1937. 9 x 6; pp. xxv, 558, 34 plates, maps and text figures. 21s. (The Publishers.)
- Interracial Marriage in Hawaii. A Study of the Mutually Conditioned Processes of Acculturation and Amalgamation.* By Romanzo Adams. New York: The Macmillan Co., 1937. 8½ x 6. pp. xiv, 353, illustrated. 18s. (The Publishers.)
- Ancient Gaza.* By W. Flinders Petrie. 3 Vols. *Objects of Daily Use.* By W. Flinders Petrie. *The Hawara Portfolio: Paintings of the Roman Age found by W. Flinders Petrie. Qua and Badari.* Vol. 3. By Guy Brunton. (Miss Jean Garlick.)
- Index to the Palace of Minos.* By Joan Evans, D.Litt., with special sections classified in detail and chronologically arranged by Sir Arthur Evans, D.Litt., F.R.S., F.B.A. London: Macmillan & Co., 1936. 10½ x 7½; pp. vi and 221. 31s. 6d. (The Publishers.)
- African Ways and Wisdom: A Contribution towards Understanding.* By T. Cullen Young. London: The United Society for Christian Literature, 1937. 8½ x 5½; pp. 144. 5s. (The Publishers.)
- African Dilemma.* By Frank Melland and T. Cullen Young. London: The United Society for Christian Literature, 1937. 8½ x 5½; pp. 171. 6s. (The Publishers.)

THE ANTIQUARIES JOURNAL

Being the Journal of the Society of Antiquaries of London.

Published Quarterly in January, April, July, October.

CONTENTS:

July, 1937, Vol. XVII, No 3.

Anniversary Address, by Sir Frederic Kenyon, President; Reply on receiving the Society's gold medal, by the Abbé Breuil; The excavation of Maiden Castle, Dorset, 3rd interim report, by Dr. R. E. M. Wheeler; St. Cuthbert's pectoral cross and the Wilton and Ixworth crosses, by T. D. Kendrick; An adulterine castle on Faringdon Clump, 2nd report, by E. T. Leeds; A chipping-floor at Orleigh Court, North Devon, by B. Simpson and I. Rogers; Notes; Reviews; Periodical Literature; Bibliography; Proceedings.

Price Quarterly, 5s. net.

Annual Subscription, 18s. 6d., post free.

Of all Booksellers.

Published for the Society of Antiquaries by HUMPHREY MILFORD, Oxford University Press, Warwick Square, E.C.4.

Lehrbuch der Völkerkunde

Unter Mitwirkung von Fachgenossen

herausgegeben von

Prof. Dr. Konrad Theodor Preuss

THIS handbook, consisting of fourteen separate monographs by leading anthropologists, is intended to be an introduction to the various branches of ethnology, each monograph being a very concentrated but exhaustive general survey of its particular subject, viz. : History and Methodology of Anthropology (by Dr. W. E. Mühlmann); Primitive Mentality (by Prof. R. Thurnwald); Primitive Religion (by Prof. K. Th. Preuss); Primitive Poetry (by Prof. K. Th. Preuss); Primitive Music (by Dr. Marius Schneider); Primitive Art (by Dr. Eckart v. Sydow); Comparative Linguistics (by Prof. G. Deeters); Sociology (by Prof. R. Thurnwald); Ethnological Jurisprudence and Primitive Law (by Dr. Leonhard Adam); Primitive Economics (by Prof. R. Thurnwald); Ergology and Technology (by Dr. H. Nevermann); The Future of the Primitive Peoples (by Prof. D. Westermann); Notes on the Collection of Ethnological Material (by Prof. K. Th. Preuss and Dr. Leonhard Adam). Each article is supplemented by a detailed list of literature. Indices of ethnological journals and of ethnographical museums all over the world, general indices of names and things, sixteen plates with illustrations, eight plates of primitive music, and a map of Africa showing the occurrence of sculpture add to the value of the handbook which ranks among the outstanding modern works on ethnology.

PRICE, cloth, RM.27 ; price to customers outside Germany RM.20.25 (=25% less)

Orders may be sent either to any bookseller in the United Kingdom or direct to

**Ferdinand Enke | Publisher | Stuttgart-W
Germany**

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

Hindu Customs. By Stanley Rice, with a Foreword by H.H. The Maharaja Gaekwar of Baroda. London: George Allen & Unwin, 1937. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. 219. 7s. 6d. (The Publishers.)

Handbuch der Methode der Kulturhistorischen Ethnologie. By Wilhelm Schmidt. Münster (Westf.): Verlag der Aschendorffschen Verlagsbuchhandlung, 1937. $9\frac{3}{4} \times 6\frac{1}{2}$; pp. 338, paper covers, 5-70 Mk. (The Publishers.)

After Us or The World as it Might Be. By J. P. Lockhart-Mummery, with a Foreword by Lord Horder. London: Stanley Paul & Co., 1936. $9\frac{1}{2} \times 6\frac{1}{2}$; pp. 287. 18s. (Canning Suffern, Esq.)

Rediscovering Illinois. Archaeological Explorations in and around Fulton County. By Fay-Cooper Cole and Thorne Deuel. Chicago: University of Chicago Press, 1937. 10×7 ; pp. xvi, 295, 46 plates. 9s. (The Cambridge University Press.)

Native Administration in Nigeria. By Margery Perham. London: Oxford University Press, 1937. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. xii, 404, 6 maps. 17s. 6d. (The Publishers.)

The Khāriās. By Sarat Chandra Roy, with a Foreword by Dr. R. R. Marett. Ranchi: Man in India Office, 1937. $9\frac{1}{4} \times 5\frac{1}{2}$; pp. v, 306. Rs. 11. (The Author.)

Archaeological Explorations in Peru, Part III. Textiles of the Early Mazca Period. By Lila M. O'Neale. Chicago, 1937: Field Museum of Natural History, Anthropology, Memoirs, Vol. II, No. 3: Second Marshall Field Archaeological Expedition to Peru. Pp. 100, 36 plates, 2 coloured plates, 1 text figure. (In Exchange.)

Archaeological Explorations in Peru, Part IV, Canete Valley. By A. L. Kroeber. Chicago, 1937: Field Museum of Natural History Anthropology Memoirs, Vol. II, No. 4. First Marshall Field Archaeological Expedition to Peru. Pp. 46, 22 plates. (In Exchange.)

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

THE DESERT FAYUM

A comprehensive account of three seasons' work on the
PREHISTORIC AND DYNASTIC ARCHÆOLOGY OF THE NORTHERN FAYUM
studied for the first time in the light of physiographical inter-relations

by G. CATON-THOMPSON, Research Fellow, Newnham College, Cambridge
and E. W. GARDNER, Research Fellow, Lady Margaret Hall, Oxford

Two volumes 12×10 inches. Vol. I, text xiv, 160 pp. Vol. II,
114 plates including 6 coloured maps showing varying lake-levels

Price Thirty Shillings.

Inland Postage One Shilling

Published and Sold by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C. 1

THE GENETICS OF ANTHROPOLOGY

are covered more fully in the

EUGENICS REVIEW

than in any other periodical in the English language

Articles in July, 1937, Vol. XXIX, No. 2 include

**Future Trends in Population.
Research on Chemical Contraception.
Policy of American Eugenics Society.
Birth Control Wins.**

R. R. KUCZYNSKI
L. R. BAKER

HANNAH M. STONE

Published Quarterly, in January, April, July, and October.

PRICE THREE SHILLINGS, or TWELVE SHILLINGS A YEAR, post free.

Free to Fellows and Members

**THE EUGENICS SOCIETY,
69 ECCLESTON SQUARE, S.W.1.**

MACMILLAN & CO., LTD.,
ST. MARTIN'S STREET, W.C.2.

DAVID NUTT, London - G. E. STECHERT & CO., New York - NICOLA ZANICHELLI, Bologna
 ALDO ALCAI, Paris - AKADEMISCHE VERLAGSGESAMTSCHAFT, Leipzig - E. B. FROST
 JOHN HENNINGSEN, Berlin - P. NEWMAN NEWMAN, London
 GEORG C. GÖTTSCHE, Göttingen - F. MARZANO & CO., Paris - VAN NORDEN COMPANY, New York

1937

"SCIENTIA"

IS THE ONLY REVIEW
 IS THE ONLY REVIEW
 IS THE ONLY REVIEW

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH
 Published monthly by the International Scientific Association
 Editors: P. NUTZ, G. E. STECHERT, F. MARZANO
 General Secretary: PAOLO MARZANO

IS THE ONLY REVIEW
 IS THE ONLY REVIEW
 IS THE ONLY REVIEW

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

British Calendar Customs. Scotland, Vol. I: Movable Festivals, Harvest, March Riding and Wapynshawe, Wells, Fairs. By Mrs. M. Macleod Banks, with a Preface by Rev. Canon J. A. MacCulloch. London, 1937: Folk-Lore Society, William Glaisher, Ltd. 9 x 6; pp. xi, 202, 8 plates. 12s. 6d. (The Publishers.)

Fact and Fiction: A Short Account of the Natives of Southern Rhodesia. By F. W. T. Posselt, Foreword by His Excellency Sir Herbert Stanley, Bulawayo. The Rhodesian Printing and Publishing Co., 1935. 9 x 5½; pp. 210; 7 illustrations. 9s. 6d.

A History of the English Coronation, with Special Reference to its Origins, its Relations to other Western Rites, and its Place in Constitutional History. By Percy Ernst Schramm, translated by Leopold G. Wickham Legg. Oxford, Clarendon Press, 1937. 9½ x 6; pp. 283. 12s. 6d. (The Publishers.)

Le Pacte de Sang au Dahomey. By Paul Hazoumé. Paris, Institute d'Ethnologie, Travaux et Memories Tome XXV, 1937. Pp. viii, 170, 7 plates, 2 figures. 45 francs. (In Exchange.)

Law and Authority in a Nigerian Tribe: A Study in Indirect Rule. By C. K. Meek, M.A., D.Sc., Oxon, with a Foreword by the Rt. Hon. Lord Lugard, K.C.M.G. London, Oxford University Press, 1937. 8½ x 5½; pp. xvi, 372, 2 maps. 17s. 6d. (The Publishers.)

A Tribal Survey of Mongalla Province. By Members of the Province Staff and of the Church Missionary Society, edited by L. F. Nalder. London, International Institute of African Languages and Culture, Oxford University Press, 1937. 8½ x 5½; pp. 232, 1 map. 15s. (The Publishers.)

The Rengma Nagas. By J. P. Mills, M.A., I.C.S. London, Macmillan & Co., 1937. 8½ x 5½; pp. x, 391, 33 illustrations. 25s. (The Publishers.)

Les Art de l'Asie: Les Animaux dans l'Art Chinois. Introduction by H. d'Ardenne de Tizac. Pp. 7, 50 plates, some in colour. (Mrs. F. D. Samuel.)

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

THE DESERT FAYUM

A comprehensive account of three seasons' work on the
PREHISTORIC AND DYNASTIC ARCHÆOLOGY OF THE NORTHERN FAYUM
studied for the first time in the light of physiographical inter-relations

by G. CATON-THOMPSON, Research Fellow, Newnham College, Cambridge
and E. W. GARDNER, Research Fellow, Lady Margaret Hall, Oxford

Two volumes 12 x 10 inches. Vol. I, text xiv, 160 pp. Vol. II,
114 plates including 6 coloured maps showing varying lake-levels

Price Thirty Shillings.

Inland Postage One Shilling

Published and Sold by

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C. 1

The Royal Anthropological Institute of Great Britain and Ireland

This Institute was established in 1871 by the amalgamation of the older Anthropological Society and Ethnological Society.

Its purpose is the study of Mankind in all its various phases. This includes Sociology, Human Biology, Religious beliefs, Rites and Customs, Prehistoric Man, Physical Anthropology, Linguistics, etc.

At its headquarters at 52, Upper Bedford Place, W.C.1, the Institute possesses a very extensive library of works on all the above subjects. Members can consult these books on the premises and also borrow them, provided the books are not wanted from the United Kingdom.

Lectures, usually illustrated by lantern slides or films, from October to June inclusive, at which the topics are read and afterwards discussed, and questions and answers asked.

Among the members of the Institute are many well-known prehistoric sites, and experts in the various branches of geology is interested. The Institute is therefore able to render help to those who wish to take up work in Britain, India, and elsewhere, and to those who are interested in the populations among whom they will live.

The Institute publishes two periodicals. The *Journal* contains reports of the most important lectures and articles from abroad and home. It also contains notices and reviews of current and original research, reports of expeditions and archaeological discoveries. The *Transactions* contain the reports of the various sections of the Institute and the reports of the various committees.

The membership of the Institute is not limited by experts (both men and women) who are interested in any of the subjects of the Institute.

The objects of the Institute are to advance the study of the various branches of anthropology and to promote the welfare of the human race.

The Institute is a non-profit-making organization and its funds are used for the benefit of the human race.

Applications for membership should be sent to the Secretary, The Royal Anthropological Institute, 52, Upper Bedford Place, W.C.1.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

- Die Geheimbrunde Westafrikas als problem der Religionswissenschaft.* By Dr. Egen Hildebrand. Leipzig, 1937. Studien zu Religionswissenschaft. Band I. 9 x 6. pp. 170. (The Author.)
- Carl Mauch, Leben und Werk des deutschen Afrikaforschers.* By Dr. Hans Offa. Stuttgart, 1937. Würt. Verein für Handelsgeographie. 9 x 6½. pp. 71.
- Menschen der Südsee, Charaktere und Schicksale. Ermittelt bei einer Buin auf Bougainville, Salomo-Archipel.* By Hilde Thurnwald. Stuttgart, Fernind Enke Verlag, 1937. 10 x 6½. pp. vi, 201. 8 plates. (The Publishers.)
- Twenty-fifth Anniversary Studies.* Edited by D. S. Davidson. Vol. I. Publications of the Philadelphia Anthropological Society. Philadelphia, University of Pennsylvania Press. London, Oxford University Press, 1937. 9½ x 6½. pp. 235. 11s. 6d. (The Oxford University Press.)
- Social Anthropology of North American Tribes.* Essays in Social Organization, Law and Religion presented to Professor A. R. Radcliffe-Brown, edited by Fred Eggan, with an Introduction by Robert Redfield and a Bibliography of Professor Radcliffe-Brown, by Ian Corinne Brown. Chicago, University Press. Cambridge University Press, 1937. 8½ x 5½. pp. xvii, 456. 13s. 6d. (The Cambridge University Press.)
- Esmeraldo de Situ Orbis.* By Duarte Pacheco Pereira. Translated by George H. T. Kimble, M.A. London, Hakluyt Society, 1937. Series II. Vol. LXXIX. (By Subscription.)
- Etude Etat die Felsbilder Fezzans.* Ergebnisse der Diafe X (Deutsch-Innerafrikanische Forschungs-expedition nach Tripolitanien und Ost-Algier mit Ergänzungen der Diafe XII aus Zentral-Algier. By Leo Frobenius. Leipzig, Otto Harrassowitz, 1937. 14 x 10½. pp. xxix, 73. 90 plates, 141 text figures. 30 RM. (Francis Edwards, Ltd.)
- The Maker of Modern Japan, the Life of Tokugawa Ieyasu.* By A. L. Sadler, M.A. London, George Allen & Unwin. 9 x 6. pp. 429. Illustrated. (Dr. Raymond Firth.)

INVALUABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

NOTES AND QUERIES ON ANTHROPOLOGY.

EDITED FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

FIFTH EDITION, enlarged and thoroughly revised. PRICE 6s. To FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C. 1.

THE DESERT FAYUM

A comprehensive account of three seasons' work on the
EGYPTIAN AND DYNASTIC ARCHAEOLOGY OF THE NORTHERN FAYUM
 studied for the first time in the light of physiographical inter-relations.

G. CATON-THOMPSON, *Research Fellow, Newnham College, Cambridge*
 & E. W. GARDNER, *Research Fellow, Lady Margaret Hall, Oxford*

Two volumes 12 x 10 inches. Vol. I, text xiv, 160 pp. Vol. II,
 114 plates including 6 coloured maps showing varying lake-levels

Price *Thirty Shillings*. *Inland Postage One Shilling*

Published and Sold by

ANTHROPOLOGICAL INSTITUTE, 52, Upper Bedford Place, London, W.C. 1

THE ANTIQUARIES JOURNAL

Being the Journal of the College of Agriculture & Forestry

Published Quarterly in January, April, July, October

CONTENTS

October, 1937, Vol. XXII, No. 10

The Church of Worcester from the eighth to the twelfth century, by Sir Ivor Atkins; A pair of fourth-century Romano-British pottery bowls near Grambsc, by Philip Corde and Margaret Bailey; A fourteenth-century well at the Bank of England, by G. G. Dunning; A curious type of stone, St. John's Head, by W. L. Hildburgh; Three styles of decoration on Anglo-Saxon pottery, by J. N. L. Myres; Notes, Obituary Notes, Reviews, Publications, Literature, Bibliography, Proposals.

Price Quarterly, 50¢.

Annual Subscription: \$10.00 (U.S. and Poss.)

TOP SECRET - FRODO

Published for the Society of Antiquaries by HENDERSON, MILLERSON, & CO.,
Printers, Warwick Square, E.C.4.

THE GENETICS OF AN

SA [redacted]

HYGIENICS

There is no other person named

October 10, 1964

1. **NAME** _____
 2. **ADDRESS** _____
 3. **CITY** _____
 4. **STATE** _____
 5. **ZIP** _____
 6. **PHONE** _____
 7. **DATE** _____
 8. **SIGNATURE** _____
 9. **PRINT NAME** _____
 10. **PRINT ADDRESS** _____
 11. **PRINT CITY** _____
 12. **PRINT STATE** _____
 13. **PRINT ZIP** _____
 14. **PRINT PHONE** _____
 15. **PRINT DATE** _____
 16. **PRINT SIGNATURE** _____
 17. **PRINT NAME** _____
 18. **PRINT ADDRESS** _____
 19. **PRINT CITY** _____
 20. **PRINT STATE** _____
 21. **PRINT ZIP** _____
 22. **PRINT PHONE** _____
 23. **PRINT DATE** _____
 24. **PRINT SIGNATURE** _____
 25. **PRINT NAME** _____
 26. **PRINT ADDRESS** _____
 27. **PRINT CITY** _____
 28. **PRINT STATE** _____
 29. **PRINT ZIP** _____
 30. **PRINT PHONE** _____
 31. **PRINT DATE** _____
 32. **PRINT SIGNATURE** _____
 33. **PRINT NAME** _____
 34. **PRINT ADDRESS** _____
 35. **PRINT CITY** _____
 36. **PRINT STATE** _____
 37. **PRINT ZIP** _____
 38. **PRINT PHONE** _____
 39. **PRINT DATE** _____
 40. **PRINT SIGNATURE** _____
 41. **PRINT NAME** _____
 42. **PRINT ADDRESS** _____
 43. **PRINT CITY** _____
 44. **PRINT STATE** _____
 45. **PRINT ZIP** _____
 46. **PRINT PHONE** _____
 47. **PRINT DATE** _____
 48. **PRINT SIGNATURE** _____
 49. **PRINT NAME** _____
 50. **PRINT ADDRESS** _____
 51. **PRINT CITY** _____
 52. **PRINT STATE** _____
 53. **PRINT ZIP** _____
 54. **PRINT PHONE** _____
 55. **PRINT DATE** _____
 56. **PRINT SIGNATURE** _____
 57. **PRINT NAME** _____
 58. **PRINT ADDRESS** _____
 59. **PRINT CITY** _____
 60. **PRINT STATE** _____
 61. **PRINT ZIP** _____
 62. **PRINT PHONE** _____
 63. **PRINT DATE** _____
 64. **PRINT SIGNATURE** _____
 65. **PRINT NAME** _____
 66. **PRINT ADDRESS** _____
 67. **PRINT CITY** _____
 68. **PRINT STATE** _____
 69. **PRINT ZIP** _____
 70. **PRINT PHONE** _____
 71. **PRINT DATE** _____
 72. **PRINT SIGNATURE** _____
 73. **PRINT NAME** _____
 74. **PRINT ADDRESS** _____
 75. **PRINT CITY** _____
 76. **PRINT STATE** _____
 77. **PRINT ZIP** _____
 78. **PRINT PHONE** _____
 79. **PRINT DATE** _____
 80. **PRINT SIGNATURE** _____
 81. **PRINT NAME** _____
 82. **PRINT ADDRESS** _____
 83. **PRINT CITY** _____
 84. **PRINT STATE** _____
 85. **PRINT ZIP** _____
 86. **PRINT PHONE** _____
 87. **PRINT DATE** _____
 88. **PRINT SIGNATURE** _____
 89. **PRINT NAME** _____
 90. **PRINT ADDRESS** _____
 91. **PRINT CITY** _____
 92. **PRINT STATE** _____
 93. **PRINT ZIP** _____
 94. **PRINT PHONE** _____
 95. **PRINT DATE** _____
 96. **PRINT SIGNATURE** _____
 97. **PRINT NAME** _____
 98. **PRINT ADDRESS** _____
 99. **PRINT CITY** _____
 100. **PRINT STATE** _____
 101. **PRINT ZIP** _____
 102. **PRINT PHONE** _____
 103. **PRINT DATE** _____
 104. **PRINT SIGNATURE** _____
 105. **PRINT NAME** _____
 106. **PRINT ADDRESS** _____
 107. **PRINT CITY** _____
 108. **PRINT STATE** _____
 109. **PRINT ZIP** _____
 110. **PRINT PHONE** _____
 111. **PRINT DATE** _____
 112. **PRINT SIGNATURE** _____
 113. **PRINT NAME** _____
 114. **PRINT ADDRESS** _____
 115. **PRINT CITY** _____
 116. **PRINT STATE** _____
 117. **PRINT ZIP** _____
 118. **PRINT PHONE** _____
 119. **PRINT DATE** _____
 120. **PRINT SIGNATURE** _____
 121. **PRINT NAME** _____
 122. **PRINT ADDRESS** _____
 123. **PRINT CITY** _____
 124. **PRINT STATE** _____
 125. **PRINT ZIP** _____
 126. **PRINT PHONE** _____
 127. **PRINT DATE** _____
 128. **PRINT SIGNATURE** _____
 129. **PRINT NAME** _____
 130. **PRINT ADDRESS** _____
 131. **PRINT CITY** _____
 132. **PRINT STATE** _____
 133. **PRINT ZIP** _____
 134. **PRINT PHONE** _____
 135. **PRINT DATE** _____
 136. **PRINT SIGNATURE** _____
 137. **PRINT NAME** _____
 138. **PRINT ADDRESS** _____
 139. **PRINT CITY** _____
 140. **PRINT STATE** _____
 141. **PRINT ZIP** _____
 142. **PRINT PHONE** _____
 143. **PRINT DATE** _____
 144. **PRINT SIGNATURE** _____
 145. **PRINT NAME** _____
 146. **PRINT ADDRESS** _____
 147. **PRINT CITY** _____
 148. **PRINT STATE** _____
 149. **PRINT ZIP** _____
 150. **PRINT PHONE** _____
 151. **PRINT DATE** _____
 152. **PRINT SIGNATURE** _____
 153. **PRINT NAME** _____
 154. **PRINT ADDRESS** _____
 155. **PRINT CITY** _____
 156. **PRINT STATE** _____
 157. **PRINT ZIP** _____
 158. **PRINT PHONE** _____
 159. **PRINT DATE** _____
 160. **PRINT SIGNATURE** _____
 161. **PRINT NAME** _____
 162. **PRINT ADDRESS** _____
 163. **PRINT CITY** _____
 164. **PRINT STATE** _____
 165. **PRINT ZIP** _____
 166. **PRINT PHONE** _____
 167. **PRINT DATE** _____
 168. **PRINT SIGNATURE** _____
 169. **PRINT NAME** _____
 170. **PRINT ADDRESS** _____
 171. **PRINT CITY** _____
 172. **PRINT STATE** _____
 173. **PRINT ZIP** _____
 174. **PRINT PHONE** _____
 175. **PRINT DATE** _____
 176. **PRINT SIGNATURE** _____
 177. **PRINT NAME** _____
 178. **PRINT ADDRESS** _____
 179. **PRINT CITY** _____
 180. **PRINT STATE** _____
 181. **PRINT ZIP** _____
 182. **PRINT PHONE** _____
 183. **PRINT DATE** _____
 184. **PRINT SIGNATURE** _____
 185. **PRINT NAME** _____
 186. **PRINT ADDRESS** _____
 187. **PRINT CITY** _____
 188. **PRINT STATE** _____
 189. **PRINT ZIP** _____
 190. **PRINT PHONE** _____
 191. **PRINT DATE** _____
 192. **PRINT SIGNATURE** _____
 193. **PRINT NAME** _____
 194. **PRINT ADDRESS** _____
 195. **PRINT CITY** _____
 196. **PRINT STATE** _____
 197. **PRINT ZIP** _____
 198. **PRINT PHONE** _____
 199. **PRINT DATE** _____
 200. **PRINT SIGNATURE** _____
 201. **PRINT NAME** _____
 202. **PRINT ADDRESS** _____
 203. **PRINT CITY** _____
 204. **PRINT STATE** _____
 205. **PRINT ZIP** _____
 206. **PRINT PHONE** _____
 207. **PRINT DATE** _____
 208. **PRINT SIGNATURE** _____
 209. **PRINT NAME** _____
 210. **PRINT ADDRESS** _____
 211. **PRINT CITY** _____
 212. **PRINT STATE** _____
 213. **PRINT ZIP** _____
 214. **PRINT PHONE** _____
 215. **PRINT DATE** _____
 216. **PRINT SIGNATURE** _____
 217. **PRINT NAME** _____
 218. **PRINT ADDRESS** _____
 219. **PRINT CITY** _____
 220. **PRINT STATE** _____

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

100

... ..

BOOKS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE.

de Folklor. By P. Saintyves. Paris, Librairie Emile Nourry, 1936. 10 x 6½; pp. vii, 5. 30 francs. (The Publishers.)

and other Chemical Achievements of the Ancient Orient. By Dr. Masumi Chikashige. Tokyo, Okakubo Uchida, 1936. 7½ x 5½; pp. vii, 102, illustrated. (The Author.)

und das Karolingische Reich, Studien zu den Handelsverbindungen des 9 Jahrhunderts. By Arfman. Stockholm, 1937, Handlingar 43 Kungl Vitterhets Historie och Antikvitets Sammens. Pp. 271, 74 plates, 38 text figures. (In Exchange.)

småföreläsningar i Danmarks Stenalder. By Nils Aberg. Stockholm, 1937, Handlingar 42:4 Kungl Vitterhets Historie och Antikvitets Akademiens. Pp. 104, 162 figures. (In Exchange.)

ier, Station-Necropole Mesolithique du Morbihan. By Marthe et Saint-Just Pequart, M. Boule, I. Vallois. Paris, 1937, Memoire 18, Archives de l'Institut de Paleontologie Humaine. Pp. 228, 0 text figures, 19 plates. 220 francs. (In Exchange.)

anthropology, An Introduction to Primitive Culture. By Alexander A. Goldenweiser. London, George G. Harrap & Co., Ltd., 1937. 9½ x 6. pp. xv, 550. 30 plates, 80 text figures. Bibliography. 18s. (The Publishers.)

Study of the Kaniro Language, Grammar and Vocabulary. By Johannes Lukas. Oxford, 1937. Published for the International Institute of African Languages and Cultures by the Oxford University Press. 7½ x 5. pp. xvii, 253. 12s. 6d. (The Publishers.)

By Ruth L. Bunzel. Extract from Handbook of American Indian Languages. Vol. IV. New York, Columbia University Press, 1935. 9½ x 6½. pp. 136. (The Publishers.)

of Oregon. By L. S. Cressman. University of Oregon. Monographs, Studies in Anthropology No. 2. 1937. 75 cents. (The Publisher.)

ulture and Relationship of African Languages. By Alice Werner, D.Litt. Longmans, Green & Co. pp. vii, 62. 4s. 6d. (The Publishers.)

Memories. By Daniel Sutherland Davidson. Memoirs of the American Philosophical Society. Vol. VI. Philadelphia, 1937. pp. x, 207. 11s. 6d. (Oxford University Press.) 06 text figures.

Delaware Ceremonies, Feasts and Dances. By Frank G. Speck. Memoirs of the American Philosophical Society. Vol. VII. Philadelphia, 1937. pp. viii, 161. 5 plates, 5 text figures. 9s. 1d. (The Oxford University Press.)

The Chinese Kinship System. By Han Yi Feng, University of Pennsylvania. Philadelphia, 1937. pp. 236. (The Author.)

ea. Reports from the Ethnographic Laboratory, Denver Art Museum, Department 1937. Nos. 1-4. pp. 18. (The Curator.)

By J. R. Firth. London, C. A. Watts & Co., Ltd., 1937. 7½ x 5. pp. 160. (Publishers.)

ABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

AND QUERIES ON ANTHROPOLOGY.

THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
new, enlarged and thoroughly revised. PRICE 6s. TO FELLOWS 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE.

52, UPPER BEDFORD PLACE, LONDON, W.C.1.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part 2. July to December, 1936

CONTENTS:

Methods in Social Anthropology, Huxley Memorial Lecture, 1936, EDWARD WESTERMARCK, Ph.D., LL.D. The Endocranial Cast of the Chimpanzee, LE GROS CLARK, D. M. COOPER, S. ZUCKERMAN. The Pygmies of the Mountains, Mandated Territory of New Guinea (With Plates XVII-XXI): J. MOYNE and KATHLEEN HADDON (MRS. RISHMETH). The Spiritual Ideas Experiences of the Tatars of Central Asia, MRS. NORA E. CHADWICK. The of Man in Rhodesia as demonstrated by Stone Implements of the early Gravel, South of Victoria Falls (With Plate XXI): A. LESLIE ARMSTRONG, F.S.A., and REV. NEVILLE JONES. The Use of Counter Irritants in the K. de B. CODRINGTON. Notes on Red Feather Money from Santa Cruz, New Hebrides (With Plates XXII-XXV): H. G. BEASLEY and P. L. JONES. Nigerian Chieftain, Some Notes on the Igala Tribe in Nigeria and the King": introduction by Sir Richmond Palmer, K.C.M.G., C.B. (Plate XXVI), MILES CLIFFORD. Proceedings of the Royal Anthropological Institute, 1936. Index.

218 pages, 9 plates, and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great

52, UPPER BEDFORD PLACE, RUSSELL SQUARE.

ROYAL ANTHROPOLOGICAL

ANTHROPOLOGY AND THE P

Presidential Address by Rev. E.

Presidential Address by Rev. E.

Price 1/6

EA: WHAT DO WE KNOW

Presidential Address by Rev. E.

Presidential Address by Rev. E.

ACCESSIONS TO THE LIBRARY OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

- The Music of the Sumerians, Babylonians and Assyrians.* By Francis W. Galpin. Cambridge University Press, 1937. Qto. pp. xiv, 110. 12 plates. 25s. (The Publishers.)
- Tahoe, een primitieve Vreesreucht.* By Dr. C. Menach. Amsterdam: H. J. Paris, 1937. pp. viii, 213. (The Publishers.)
- The Egyptian Gods.* By Alan W. Shorter. London: Kegan Paul, Trench, Trubner & Co., Ltd., 1937. 7½ x 5. pp. xiv, 143. 4 plates. 3s. 6d. (The Publishers.)
- Religion and Medicine of the Ga People.* By M. J. Field. London: Oxford University Press, 1937. pp. viii, 214. Illustrated. 17s. 6d. (The Publishers.)
- Primitive Intelligence and Environment.* By S. D. Porteus, D.Sc. New York: Macmillan & Co., 1937. pp. viii, 325. 15s. (The Publishers.)
- Archæology of St. Laurence Island, Alaska.* By H. B. Collins. Washington: Smithsonian Miscellaneous Collections, Vol. 96, No. 1, 1937. pp. x, 430. 84 plates. (In Exchange.)
- Die Metallkunst der Landnehmenden Ungarn.* By Nandor Fettich. Budapest: Archaeologia Hungarica, XXI, 1937. pp. 303. 137 plates. (By Subscription.)
- The Crown of the Emperor Constantine Monomachos.* By Magda Barany-Oberschall. Budapest: Archaeologia Hungarica, XXII, 1937. pp. 96. 19 plates. (By Subscription.)
- Ethnology of Uvea (Wallis Island).* By Edwin G. Burrows. Honolulu: Bernice P. Bishop Museum, Bulletin 145, 1937. pp. 176. 8 plates. 29 text-figures. (In Exchange.)
- Human Affairs, An Exposition of what Science can do for Man.* Planned and edited by R. B. Cattell, J. Cohen and R. M. W. Travers. London: Macmillan & Co., Ltd., 1937. pp. 359. 10s. 6d. (The Publishers.)
- Legends of Hawaii.* By Padraic Colum. New Haven: Yale University. London: Oxford University Press, 1937. 9½ x 6. pp. xiv, 220. (Oxford University Press.)
- Chinese Fairy Tales and Folk Tales.* Collected and translated by Wolfram Eberhard. London: Kegan Paul, Trench, Trubner & Co., Ltd., 1937. 8½ x 5½. pp. xiv, 304. (The Publishers.)
- Die Kultur der Miao-Tse nach Älteren Chinesischen Quellen.* By Chang-Kong Chin. Mitteilungen aus dem Museum für Völkerkunde in Hamburg. XVIII, 1937. pp. 32. 41 plates. (In Exchange.)
- Took So, A Small House Ruin, Chaco Canyon, New Mexico.* Preliminary Report. By Donald D. Brand, Florence M. Hawley, Frank C. Hibben and others. Albuquerque: University of New Mexico. Bulletin, 1937. pp. 174, 23 plates. 7 figs, 4 maps, bibliography.
- The Hair in Health and Disease.* By Edward Lawrence. London: Sir Isaac Pitman & Sons, Ltd., 1937. pp. 181, xiv. Illustrated. 5s. (The Publishers.)
- Leçons et Costumes des Manjars.* By A. M. Vergiat. Paris, Payot, 1937. 9 x 5½. pp. 323, 90 text-figures and 24 plates. 40 francs. (The Publisher.)

AVAILABLE TO ALL TRAVELLERS AND RESIDENTS AMONG PRIMITIVE RACES

ES AND QUERIES ON ANTHROPOLOGY.

FOR THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

Revised, enlarged and thoroughly revised. PAPER 6s. TO FELLOWS, 4s. 6d.

Published by

THE ROYAL ANTHROPOLOGICAL INSTITUTE,

52, UPPER BEDFORD PLACE, LONDON, W.C.1.

JOURNAL OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

Vol. LXVI. Part 2. July to December, 1936

CONTENTS:

Methods in Social Anthropology, Huxley Memorial Lecture, 1936, EDWARD WESTERMARCK, Ph.D., LL.D. The Endocrinal Gland of the Chimpanzee, W. S. LE GROS CLARK, D. M. COOPER, S. ZUCKERMAN. The Pygmies of the Atene Mountains, Mandated Territory of New Guinea, (With Plates XVII-XX): LORD MOYNE and KATHLEEN HADDON (MRS. RISHWORTH). The Spiritual Ideas and Experiences of the Tatars of Central Asia, MRS. NORA K. CHADWICK. The Antiquity of Man in Rhodesia as demonstrated by Stone Implements of the ancient Zambesi Gravels, South of Victoria Falls (With Plate XXI): A. LESLIE ARMSTRONG, M.D., F.S.A., and REV. NEVILLE JONES. The Use of Counter Irritants in the Ditch by K. de B. CODRINGTON. Notes on Red Feather Money from Santa Cruz group, New Hebrides (With Plates XXII-XXV): H. G. BEASLEY and F. L. JONES. A Nigerian Chieftain, Some Notes, on the Igbo Tribe in Nigeria and their "Divine King": introduction by Sir Richmond Palmer, K.C.M.G., C.B.E. (With Plate XXVI), MILES CLIFFORD. Proceedings of the Royal Anthropological Institute, 1936. Index.

215 pages. 5 plates, and many illustrations in the text.

Price 15s. net

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland,

52, UPPER BEDFORD PLACE, RUSSELL SQUARE, LONDON, W.C.1

THE PROCEEDINGS OF THE INTERNATIONAL CONGRESS

OF ANTHROPOLOGICAL AND ETHNOLOGICAL SCIENCES

FIRST SESSION: LONDON: 30 JULY - 4 AUGUST, 1936

CONTENTS.—Summary of Proceedings.—Address of the President, the Hon. H. H. KENNEDY, M.P., by Mr. ARTHUR GOSWAMI, M.A., Professor T. G. HODGKIN, Dr. H. R. HODGKIN, and Professor J. H. H. HODGKIN. The Address of the President to the Congress, covering all subjects of Anthropology and Ethnology, List of Officers, General Register of Governments, Universities and Learned Societies, Members and Associates.

Copies are now on sale to the public, price twenty-five shillings net.

THE ROYAL ANTHROPOLOGICAL INSTITUTE, 52, UPPER BEDFORD PLACE, LONDON, W.C.1

Central Archaeological Library,
NEW DELHI.

Call No. 572.05
Man.

Author—

Title— Man Vol. 14, No 13
Sept. 1979

Borrower No.	Date of Issue	Date of Return
<u>Bak Kishan</u> <u>N. M. S. S. S.</u>	<u>9-5-80</u>	<u>20/9/84</u>

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
GOVT. OF INDIA
Department of Archaeology
NEW DELHI.

Please help us to keep the book
clean and moving.